

Navigation Committee

AGENDA

Thursday 27 October 2016

2.00pm

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1.	To receive apologies for absence	9-
2.	To note whether any items have been proposed as matters of urgent business	
3.	To receive Declarations of Interest	
4.	Public Question Time To note whether any questions have been raised by members of the public	
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14.	Current Issues Open forum	
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16.	To note the date of the next meeting – Thursday 15 December 2016 at Yare House, 62-64 Thorpe Road, Norwich commencing at 2.00pm	

Navigation Committee

Minutes of the meeting held on 8 September 2016

Present:

Mr M Whitaker (Chairman)

Mr J Ash Sir P Dixon Mr G Munford
Ms L Aspland Mr A Goodchild Mrs N Talbot
Mr M Bradbury Mr M Heron Mr B Wilkins
Mr W Dickson Mr J Knight

In Attendance:

Mrs L Burchnall – Head of Ranger Services

Mr A Clarke - Senior Waterways and Recreation Officer

Ms E Guds – Administrative Officer (Governance)

Ms M Hammond – Planning Officer

Mr D Hoare – Environment & Design Supervisor

Ms E Krelle - Head of Finance

Ms A Leeper – Asset Officer

Ms A Long – Director of Planning and Resources

Dr J Packman - Chief Executive

Mr R Rogers – Head of Construction, Maintenance and Environment

Ms C Smith - Head of Planning

Ms T Wakelin - Director of Operations

2/1 To receive apologies for absence

Apologies for absence were received from Kelvin Allen and Alan Goodchild.

The Chair reported that comments received from Kelvin Allen would be incorporated into the discussion.

2/2 To note whether any items have been proposed as matters of urgent business/ Variation in order of items on the agenda

No items had been proposed as matters of urgent business

2/3 To receive Declarations of Interest

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

2/4 Public Question Time

There were no public questions.

2/5 To receive and confirm the minutes of the Navigation Committee meeting held on 21 April 2016

The minutes of the meeting held on 21 April 2016 were confirmed as a correct record and signed by the Chairman.

2/6 Broads Plan Review: Draft for Consultation – Navigation and Recreation Sections

Members received a report which set out the progress on the current review of the Broads Plan, the key strategic management plan for the Broads. The current Plan was adopted in May 2011 and its review was identified as a Strategic Priority for 2015/16. It was anticipated that the revised Plan would be adopted in March 2017.

A first draft of the revised plan was subject to public consultation between February and April 2016. All responses received from this consultation were considered and a second revised draft Plan was now being prepared.

The report introduced the Navigation and Recreation sections of the proposed revised draft Broads Plan. The full revised draft Plan would be considered by the Broads Authority on 30 September 2016 and would be subject to public consultation between October and December 2016.

Members were informed that the section on navigation had been strengthened and made more ambitious as requested and it was explained that the focus had been on projects which had some degree of certainty. It was pointed out that as a high level plan, the Broads Plan was not just a plan for the Broads Authority but for other organisations as well and that more detail would be added to the Plan at a later stage.

Comments with regards to aligning the Broads Angling Strategy to the Broads Plan were taken on board, pending the outcome of the forthcoming angling meeting and other comments made would be looked at as part of the Landscape Partnership Bid.

Although it was recognised that it was difficult to comment on a Plan which had not been completed yet, Members were pleased that the Plan identified the benefits of sediment removal and included a proposal to review access to closed broads and opening them up for navigation.

Members noted the report.

2/7 Waterways Specification Update, Irstead

Members received a report which summarised the technical and regulatory feasibility of deepening the channel of the River Ant at Irstead Shoals to meet the Waterways Specification of 1.8 m. This would involve dredging the natural river bed rather than the normal removal of deposited sediment and therefore

would be classed as capital dredging with a different suite of regulatory controls to satisfy.

The cost of deepening the channel would be in the order of £60,000. The number of boats affected was very small and the number of times of the year when it was an issue was small.

The Committee was asked for its view as to whether the deepening of this stretch of river should be pursued and its relative priority so that this could be taken into account when officers were compiling the 2017/18 dredging programme, which would be brought to the October meeting for consultation.

One Member believed that there was a considerable risk for vessels to get stuck on the riverbed and another believed it would be justified to spend some funds on tree clearance on the east bank as it would make navigation safer. Concern was raised about the accuracy of the mean water level and the cost involved in deepening the channel. It was clarified that the difference in cost between normal dredging and capital dredging was approximately £30,000, but as the Authority had not scheduled to do any dredging in the Shoals, the real cost would be £60,000.

Members supported the suggested provision of signage to indicate water depth at the Shoals to forewarn boaters and urged the Authority as a priority to improve the signage currently in place, preferably to be replaced by electronic signage at a future date.

Some concern was raised whether removal of the natural gravel bed would have an impact on the river ecology and the majority of the Members questioned the need to deepen the channel where only a very small number of deep keeled craft experienced difficulties. The majority agreed that spending a high level of expenditure on a small stretch of water was not a priority.

Members noted the report.

2/8 Issues on the River Chet

Members received a report which gave a summary of the latest position regarding Norfolk County Council's proposals for the extinguishment of the Wherryman's Way on the true left bank of the River Chet and the results of water level monitoring that the Broads Authority had been carrying out since May 2016. The report highlighted that the BLAF resolved to advise the County Council under Section 94 (4) of the Countryside and Rights of Way Act 2000 to place a traffic regulation order (TRO) on the route rather than extinguishing it.

Members were in agreement that working together with Parish and District Councils to find a solution to prevent the bank from collapsing would be the correct approach. They also agreed that hydraulic modelling was essential to get a better idea of what to expect in the future. The BA and County Council

are working on a joint tree scrub clearance project. A meeting will take place in October to explore a number of options. Likely cost of carrying out this work is to be considerably reduced from an initial estimate cost of £3M.

Following complaints, officers have looked into the feasibility and cost of removing the navigation channel markers on the River Chet and Members were invited to comment on the options available.

It was proposed that all 37 posts should be removed, as there was not a significant saving to be made by leaving a small number of them in. Members were informed that because the Environment Agency didn't have the necessary equipment to remove the channel posts the Authority was better placed to undertake the work.

Members were made aware that the Boat Safety Management Group (BSMG) and the Broads Hire Boat Federation (BHBF) had been consulted by email and supported the removal of the channel posts.

Considering the high mobilisation cost involved it was suggested that it would be sensible to see whether there were other tasks in the area could be carried out at the same time.

It was noted that the Environment Agency was willing to discuss making a financial contribution towards the cost of removing the posts and the Head of Planning would continue discussions with the Agency's officers.

Members supported the officer suggestion that the Broads Authority should:

- (i) undertake this work at an estimated cost around £60,000 in the 2017/18 work programme so it would not have any implications on the existing program.
- (ii) remove all posts, given the limited savings which would be achieved through removal of only half of them; and
- (iii) provide the commitment sought by the Environment Agency (outlined at 3.4 (a) (c)) in order to allow the removal of the posts.

2/9 Purchases from Plant, Vessel and Equipment Reserve

Members received a report outlining the opportunity to purchase a second hand weed-harvester, linkflotes and replacement small tools. The proposal was to spend £166,000 from the Plant, Vessels and Equipment Reserve not previously budgeted in this financial year. This required consultation with the Committee and authorisation from the Authority at its next meeting.

It was clarified that the linkfloats that needed replacement were part of the equipment gifted to the Authority by May Gurney much of which the Authority knew at the time had a limited life.

The replacement of some of the hand held equipment would remove some of the restrictions to its use by staff and volunteers due to vibration hazards. One of the two weed-harvesters owned by the Authority needed to be replaced and Members were informed that a second hand vessel in good condition, suffering from only minor cosmetic issues, was being offered for sale at £30,000. Although the weed-harvester would have to be transported from Scotland, it was confirmed that transport would only cost approximately £2,000.

Members recognised that having to keep repairing the current weed harvester would not be cost effective and that a new second hand machine could help with the management of water plants on Hickling Broad.

The Committee agreed that it was imperative for staff and volunteers in the field to have suitable equipment available to them to enable them to carry out the challenging tasks they have in front of them. Members supported the additional expenditure and asked for future reviews to identify where changes are made to earlier versions, for improved transparency. In this review, it would have clearly demonstrated that the linkflotes were originally programmed for purchase in 2017/18.

Members noted the report.

2/10 Draft Policy on Waste Collection and Disposal in the Broads National Park

Members were briefed on the current position with relation to waste facilities throughout the Broads and members' views were sought on the proposed policy and actions set out within the report.

Potential ways forward on some of the issues had emerged from discussions with officers from Norfolk County Council and North Norfolk District Council which officers were pursuing.

Members supported the draft policy including the proposal that the Authority should work together with the local authorities and local MPs to put pressure on Defra to amend the Regulations such that waste from hired boats in the Broads is in future classified as domestic rather than commercial waste.

Members strongly expressed the view that it was essential to have appropriate collection and disposal arrangements before the beginning of the 2017 season. A member suggested that a very small surcharge on tolls (e.g. £5) could be introduced if it should be necessary for BA to fund some element of waste disposal.

Members noted the report.

2/11 Planning application with Navigation Implications: Variation of Conditions 2, 3 and 19 and Removal Conditions7, 11, 12, 20 and 24 from Permission BA/2014/0248/FUL

Members of the Committee received a report which outlined a planning application to vary and remove the conditions of an existing planning permission which allowed for the creation of fen and installation of temporary fish barriers to facilitate the lake restoration at Hoveton Great Broad, Hudson's Bay and Wroxham Island, River Bure, Hoveton and Wroxham. The reason given by the applicant for amending the scheme was that the Wroxham element would not be funded by the HLF or the LIFE funding.

Members in general felt disappointed as one of the advantages and the only public benefit of the initial planning application was that Wroxham Island would be improved, however without sediment it would remain in a terrible state. When queried it was explained that less sediment was now required to be removed and the application stated that the sediment could be accommodated in the three proposed sites within Hoveton Great Broad.

Members of the Committee recognised, reluctantly, that there was no clear planning reason for the application to be refused and accepted that the removal of the approved temporary sediment pumping pipeline from the scheme would result in a marginal benefit to navigation, however they regretted the removal of the Wroxham Island element of the scheme as it was the area that had the most public benefit.

As the Heritage Lottery Fund seemed to be sympathetic to projects with public interest and might recognise Wroxham Island as a restoration project of an important site within a National Park, the Committee suggested that the Chief Executive should consider approaching them.

It was explained that this was not an issue directly relevant to the planning application.

Members noted the report.

2/12 Annual Income and Expenditure Report 2015/16

Members received a report which set out a summary of the Authority's income and expenditure for the 2015/16 financial year, analysed between national park and navigation funds. Original and Latest Available Budget information was provided for comparison.

It was noted that the total navigation surplus for 2015/16 was a little higher than budgeted and higher than forecast, with a result that the balance of the navigation reserve at the end of 2015/16 was slightly above the recommended minimum reserve balance of 10% at 11.3%.

Members noted the report.

2/13 Navigation Income and Expenditure 1 April to 30 June 2016 Actual and 2016/17 Forecast Outturn

Members received a report which provided them with details of the actual navigation income and expenditure for the three month period to 30 June 2016, and provided a forecast of the projected expenditure at the end of the financial year (31 March 2017).

The Committee received a verbal update up to 31 July 2016 which indicated a forecast surplus of £7,080. They were further informed that the Authority would participate in a benchmarking exercise carried out by all National Parks combined. This would enable the Authority to feedback how they compared to other National Parks.

Members noted the report.

2/14 Construction, Maintenance and Environment Work Programme Progress Update

Members received a report which set out the progress made in the delivery of the 2016/17 Construction, Maintenance and Environment Section work programme and included an update on the Hickling Enhancement Project.

With regard to Hickling it was queried whether more work could be done in managing water plant growth, especially at the surface. It was explained that the initial approach had been to gain agreement to the maintenance of the channel across the Broad to the Pleasure Boat Inn. The next step was to look at an agreed process for cutting plants beyond the channel.

A Member asked a question about floating plant material and it was explained that the removal of this did not require consent and could therefore be collected if it was causing difficulties.

It was agreed that a wider discussion around water plant growth and cutting outside the channel in Hickling Broad was needed, involving the Environment Agency and the Norfolk Wildlife Trust.

Members noted the report.

2/15 Chief Executive's Report

The Committee received a report which summarised the current position in respect of a number of projects and events, including decisions taken during the recent cycle of committee meetings.

Members were informed that the Tolls Working Group had now completed its discussions and that a report would be presented at the Navigation Committee meeting in October.

A member asked about the trial stern-on mooring at the Ferry Inn, Horning. Officers agreed to bring a report on the matter to a future meeting.

Members noted the report.

2/16 Current Issues

Reedham and Somerleyton Bridges

Members were updated on how Network Rail was progressing and were informed that the next meeting with Network Rail was on 20 September 2016. As soon as the Authority had more information this would be fed back to the Committee. However it is unclear whether the report will be confidential or published more widely.

Ludham Bridge

It was mentioned that navigation at Ludham bridge was becoming more difficult, especially when sailing with a lowered mast. It was therefore queried whether additional Ranger support would be necessary, especially at busy times.

It was explained that Rangers were aware of the situation at Ludham Bridge and had on occasion moored further up and offered assistance on the bank when issues were arising.

2/17 Items for future discussion

No items for future discussion were mentioned.

2/18 To note the date of the next meeting

The next meeting of the Committee would be held on Thursday 27 October 2016 at Yare House, 62-64 Thorpe Road, Norwich commencing at 2pm.

The meeting concluded at 4.35pm

Chairman

APPENDIX 1

Code of Conduct for Members

Declaration of Interests

Committee: Navigation Committee

Date of Meeting: 8 September 2016

Name Please Print	Agenda/ Minute No(s)	Nature of Interest (Please describe the nature of the interest)	Please tick here if the interest is a Prejudicial interest
James Knight	2/6 - 2/15	Hire Boat Operator, Toll Payer, member of NSBA, NBYC, RYA, WODYC	
Brian Wilkins	2/6 - 2/15	NSBA Chairman, Toll Payer, various sailing clubs and organisations	
Greg Munford	2/6 - 2/15	Toll Payer, Hire Fleet, Residence Mooring	
Nicky Talbot	2/6 - 2/15	Toll Payer, Member of NSBA and NBYC	
Max Heron	2/6 - 2/15	Toll Payer, Landowner, Member of British Rowing, NRC, NSBA, RCC, Chair Whitlingham Boathouses	
Matthew Bradbury	2/6 - 2/15	Toll Payer, Trustee of WCT, BCU Member	
John Ash	2/6 - 2/15	Toll Payer, Chairman and Director of WYCCT, Trustee of How Hill and NSBCT	
Michael Whitaker	2/6 - 2/15	Toll payer, Hire Boat Operator, BHBF Chairman	

Summary of Actions and Outstanding Issues Following Discussions at Previous Meetings Report by Administrative Officer

Date of Meeting and Minute No	Discussion	Responsible Person	Summary of Actions and Outstanding Issues
26 February 2015 Minute 4/6 Summary of Actions and Outstanding Issues Following Discussions at Previous Meetings	Update in relation to negotiations over 24hr moorings at Thurne Mouth and Boundary Farm	Head of Planning	Discussions with the landowner are still ongoing. 40 metres of 24 hour moorings have been secured on the site and options for the rest of the mooring are still under discussion.
10 December 2015 Minute 3/11 Review of Waste Facilities	The Committee agreed that apart from monitoring the position regarding waste facilities, further action was needed	Director of Operations	At the meeting on 30 September the Broads Authority adopted the draft waste policy as supported by the Navigation Committee and the agreed actions. Officers are working with County? District Councils accordingly.
8 September 2016 Minutes 5/7 Waterways Specification Update, Irstead	Members supported the suggested provision of signage to indicate water depth at the Shoals and urged the Authority the signage	Director of Operations	Signage is currently being reviewed by officers for additional information to be provided at How Hill moorings for vessels travelling through Irstead.

Date of Meeting and Minute No	Discussion	Responsible Person	Summary of Actions and Outstanding Issues
	preferably to be replaced by electronic signage at a future date.		

Tolls Review 2016 and Proposed Navigation Charges for 2017/18 in the Navigation Area and Adjacent Waters

Report by Chief Executive, Head of Finance and Collector of Tolls

Summary:

This report consults the Committee on the proposals by the seven members of the Tolls Working Group for the restructuring of navigation charges. The full report is contained in Appendix 1. There are three main recommendations:

- A new set of Guiding Principles for Tolls
- A simple charging structure based on the area of each vessel
- A flexible charging structure where different categories of vessel can be levied different rates per square metre

In addition a range of subsidiary matters are considered.

This report then identifies the level of income required in 2017/18 to maintain the existing level of services and take account of the further predicted fall in the number of hire boats. This is then combined with the proposed new charging structure to present a draft list of charges for different categories and sizes of vessel in 2017/18. The Committee is asked for its views on each proposal.

1 Introduction

- 1.1 This report examines progress over the last six months following decisions on tolls for 2016/17 by the Broads Authority in November 2015, in line with recommendations of this Committee. It then introduces the report of the Tolls Working Group. Finally, it considers the level of income required to maintain the current level of services, taking into account the predicted fall in the number of hire boats, and combined with the Working Group's proposals to develop a schedule of navigation charges for 2017/18.
- 1.2 If the recommendations of the Working Group are accepted, they will probably represent the most significant change in the way navigation charges are levied since 1981, which saw a move to charging on the basis of area of the craft rather than tonnage. The two main effects will be:
 - (a) The change in the calculation of the charge from fixed and variable components to a purely variable element will reduce the costs for small boats, whose numbers have been in decline, and increase the costs for the larger boats.

(b) The removal of multipliers and discounts will provide a more flexible system, able to adapt to the changes in different fleets.

2 Progress over the last year

2.1 Last year the Authority faced a difficult decision after the very low toll increase in 2015/16 of 1.7%, the continuing reduction in hire boat numbers, and pressures on expenditure. Members of the Authority adopted the Navigation Committee's recommendation of a 4.5% increase in income combined with a reduction in the hire boat multiplier from 2.62 to 2.55. This was part of a package that involved £93,000 of additional expenditure (Table 1). It included £30,000 for the Hickling Enhancement Project, an extra £49,000 for operational works, and the cancellation of the removal of the Dickey Works.

Table 1 Areas of Additional Expenditure

Additional Expenditure	Amount
Extra Operational Works	+£49,000
Hickling dredging this year and next	+£30,000
Salary increase +1%, additional pension costs	+£28,000
Increased costs of maintaining Mutford Lock	+£6,000
Cancel work on removal of the Dickey Works	-£20,000
Additional Expenditure	+£93,000

- 2.2 The Hickling Enhancement Project is on target for delivery, with 3,500m³ of priority dredging being carried out in the winter of 2015/16, as well as a trial area using geotextiles recreating eroded land at Hill Common. In October 2016 the Authority began the first phase of constructing bays using timber posts and geo-textiles to form a perimeter wall into which dredged material will be pumped. These areas, in Churchill's Bay and the Studio Bay, will be planted with reed and mace to recreate land lost to erosion and restore habitat. The next phase in 2017/18 is to develop agricultural land to receive pumped dredgings into lagoons, where it can be naturally dried, spread and used to replenish low lying agricultural land, as well as trialling geotextiles as a temporary barrier to wind and wave erosion.
- 2.3 In 2015/16 dredging to restore rivers and broads to their required profiles and specification saw sediment removal exceed the target of 50,000 cubic metres by 1,435 cubic metres. Total volumes removed reached 103% of the estimated target volume.
- 2.4 The Authority's Environment Officers mapped and developed priority areas for tree clearance along the River Ant, targeting bankside trees, encroaching

- vegetation and areas of 'wind-shadow'. In 2015/16 the Authority cleared over 4km of trees and is continuing to target problem areas on the middle Bure and the Thurne so that a similar operation can take place over the winter of 2016.
- 2.5 Table 2 shows the number of weekly hired cruisers by year. The temporary recovery in numbers shown in the table was the result of the company 'Le Boat' bringing a total of 42 boats from Ireland, most of which arrived for the 2009/10 season but have since gone.

Table 2 Number of Hired Motor Cruisers

1	Year	2008	2009	2010	2011	2012	2013	2014	2015	2016
	No.	803	843	878	904	894	869	842	821	789

2.6 The established pattern of change in the private fleet also continues, as shown in Table 3, with a fall in the number of small motor boats and an increase in the number of larger ones.

Table 3 Private Motor Boat Numbers by Size

Size m²	2008	2009	2010	2011	2012	2013	2014	2015	△ 2008-15	%∆ 2008-15
1-10	2292	2130	1930	1940	1866	1844	1828	1775	-517	-22.6%
11-20	1795	1923	1956	1991	1958	1983	1960	1950	+155	8.6%
21-30	1427	1487	1529	1566	1603	1614	1642	1630	+203	14.2%
31-40	736	765	800	814	819	865	865	893	+157	21.3%
41-50	283	294	289	296	304	319	343	364	+81	28.6%
51-60	39	46	44	51	60	63	65	65	+26	66.7%

3 Proposed New Charging Structure

- 3.1 Over the last year a group of seven members of the Broads Authority, five of whom were also members of the Navigation Committee have, at the request of the Broads Authority, undertaken a comprehensive review of the structure of the charges levied in the navigation area and adjacent waters. A copy of their report is at Appendix 1.
- 3.2 The Group makes three main recommendations for the Navigation Committee and the Broads Authority to consider:
 - (i) A new set of Guiding Principles for Tolls.
 - (ii) A revised structure for the tolls in which for each class of vessel the owner will pay a set amount per square metre. Wherries, rowing boats, canoes and kayaks will pay a flat rate charge.

- (iii) A flexible charging structure, such that the different fleets on the Broads can be levied different rates per square metre.
- 3.3 In addition, the Group makes seven subsidiary recommendations:
 - a) The eight wherries should be charged a flat rate, to reduce their overall costs and reflect their iconic status.
 - b) Electric boating should continue to be encouraged through lower rates, but boats that use diesel generators to charge electric engines should be charged at the appropriate higher motor boat rate.
 - c) The current discount for early payment provided to the larger hire boat operators should be discontinued, but the provision for staged payments should be retained.
 - d) The non-display of toll plaques trial should be extended for a further year.
 - e) The charges for craft in adjacent waters should remain identical to those in the Navigation Area.
 - f) The charges for passing through Mutford Lock should seek to recover the annual costs involved.
 - g) The current charging policy regarding boats removed from the Broads system (Navigation Area and adjacent waters) should be retained.

4 Draft Income and Expenditure for 2017/18

- 4.1 In the coming year, with the proposed restructuring of the tolls and the continuing loss of income from the hire fleet, the officer view is that there is little or no margin for any additional activity.
- 4.2 In developing draft income and expenditure figures for 2017/18, the outturn for this year's budget has been reviewed. Table 4 shows that Navigation Income for the current year 2016/17 is below the forecast and is anticipated to be approximately £22,100 below the budgeted figure at the end of the financial year. While income from private boats has generally been above the estimate, income from the hire boat fleet is continuing to fall. The provision for a reduction of £20,000 in hire boat income has proved too optimistic, with a reduction of 32 registered weekly hire boats and two passenger boats giving rise to a loss in income from commercial craft of around £46,000.
- 4.3 Net expenditure is predicted to be down by £15,546 at the end of the year. This is a combination of additional income from the electric charging cards and small savings on a number of budgets, i.e. legal, safety management, IT, governance, vehicles and Yare House. The predicted outturn for 2016/17 is therefore a slightly increased deficit of £8,947. The Navigation Reserve is predicted to remain just above the minimum level of 10.0%

4.4 Turning to income for 2017/18, the advice from the Broads Hire Boat Federation is that at least a further 20 hire boats will be taken out of the fleet next year. Taking an average income from a weekly hire craft this year of just over £1,000, this equates to a further loss of over £20,000 next year. From the information supplied, this change appears to be at the bigger yards where the investment programmes involve building new boats and removing a larger number of older vessels from the fleets.

Table 4 Budget for 2016/17 and Predicted Outturn compared to Draft Income and Expenditure for 2017/18

	Latest Available Budget 2016/17	Predicted Outturn 2016/17	Draft Income & Expenditure 2017/18
Navigation Income	£3,119,839	£3,097,739	£3,179,500
Expenditure	£3,122,233	£3,106,687	£3,178,333
(Surplus)/ Deficit	£2,394	£8,947	(£1,167)
Transfer of accrued interest to ear-marked reserves	£5,000	£3,750	£3,750
Opening Reserves	£333,090	£333,090	£320,392
Closing Reserves	£325,695	£320,392	£317,809
Reserves as % of Expenditure	10.4%	10.3%	10.0%

- 4.5 At this stage in the financial year there are a significant number of unknowns around the Authority's expenditure for next year. One of these is the outcome of the triennial review of the pension fund, which is unlikely to be known until the end of November. A detailed draft budget for 2017/18 will be brought to the next meeting in December when more is known.
- 4.6 In terms of expenditure for next year, the Hickling Enhancement Project is one of the Authority's strategic priorities and involves a commitment of £60,000 per annum, shared equally between National Park and Navigation expenditure. This commitment continues until 2019/20.
- 4.7 The current plan for 2017/18 is for mud-pumping in the marked channel with discharge to an arable field. This involves signing an agreement with the landowner before Christmas 2016 to give him confidence that the Authority is going to progress the project, and adequate time to adjust his cropping regime. The Authority's Environment Officers have started the evidence gathering process for the submission of an application for an Environmental Permit in February 2017 for the storage and land-spreading of sediment. Site preparation and lagoon construction on the field is planned for August 2017. An external contract is to be let for the mud-pumping work programmed to start in November 2017. The tendering process for the mud-pump contract is planned to start in April 2017.

- 4.8 The Authority submitted a bid for European funding to support the Hickling Project, and on 5 October was told that the Expression of Interest had been accepted and approval for the submission of a full application given. However the RSPB, as lead partner, is now questioning whether, in the light of the decision for the UK to leave the European Union, it is appropriate for the application to be led by a partner based in this country. The full implications of this and a potentially successful bid will be re-evaluated over the coming weeks and a report brought back to this Committee.
- 4.9 Other pressures acting on the expenditure include cost of living increases and increments for staff salaries, increased pension contributions, the apprenticeship levy, and upward pressure on the costs of equipment and materials.
- 4.10 The apprenticeship levy is to be introduced from 6 April 2017 and requires all employers, both public and private sector whether with apprentices in their workforce or not, operating in the UK with a pay bill over £3 million to contribute 0.5% of their annual pay bill. For the Broads Authority this is a sum of £16,500, £9,900 funded from National Park Grant and £6,600 from Navigation Income.
- 4.11 This Committee, key stakeholder organisations such as the Broads Hire Boat Federation (BHBF) and Norfolk and Suffolk Boating Association (NSBA), and boat owners in general, as evidenced through the 2014 stakeholder survey, all want more work carried out and more services delivered. The removal of the Dickey Works was delayed last year at a cost of £20,000. The provision of new moorings, waste collection costs and electronic signage have all been considered but ruled out this year because of the other pressures on the budget. However, £10,000 of additional expenditure for signage has been included for the 24 hour moorings sign upgrade. Work on identifying potential new mooring sites is on-going and proposals with the financial implications will be brought forward in due course.
- 4.12 The difference between the level of Expenditure in the Latest Available Budget for the current year and the Draft Budget for next year as shown in Table 4 is £56.100 and the detail is shown in Table 5 below.

Table 5 Proposed Areas of Change in Expenditure for 2017/18

Expenditure Change	Amount
Salary increase +1%, draft pension costs	+56,201
Apprenticeship Levy (0.5% salary costs)	+6,600
Vehicles savings	-6,300
Mutford Lock routine maintenance & operational costs	+7,000
Electric Charging Points additional Income	-1,500

Signage	+10,000
Standby	+1,675
Oil spill	+1,500
Asset Management Building survey 1 off in 2016/17	-4,500
Yare House Lease adjustment	-3,728
Whitlingham Charitable Trust recharge	-6,982
Photocopier lease savings	-2,706
Other minor savings	-1,160
Additional Expenditure	+£56,100

- 4.13 To accommodate the Hickling project and the items listed above, total income and expenditure will both need to be in the order of £3.18 million (see Table 4) to maintain services at the existing level with reserves at the recommended minimum level of 10.0% of expenditure.
- 4.14 The decline in the number of hire boats and passenger boats, although small in the context of the total number of boats using the Broads, is significant because of the amounts they pay. A key question is how the continuing reduction in income from the hire fleet, predicted to be at least £21,000 for the coming year, should be accounted for against the 14 categories of boats proposed in the new tolls structure. To date the loss of income in the hire fleet has been spread across all 12,000 boats. Given the magnitude of the changes proposed to the charging structure, this practice has continued in developing the draft schedule of navigation charges for 2017/18.
- 4.15 These charges have also been calculated on the basis that the income sought in 2017/18 for each of the 14 categories of vessel is broadly in line with that received for 2016/17 plus the amount necessary to meet the increase of £56,100 of cost pressures. The proposed new structure of charges has helped not only in simplifying the arrangements but making them more transparent. Table 6 below summarises the proposed charge for each category, the number of boats currently in each category and the income produced.
- 4.16 Appendix 2 contains the same information broken down by size of vessel in each category. It shows the toll paid for that size of vessel this year, what the toll would have been under the proposed new structure and the cash difference. The following column has the proposed charge for next year and difference with what was paid this year. This will allow individual toll payers to look at the implications of this report for boats on the system.

4.17 Table 6 shows that the category contributing the largest proportion of the tolls is private motor boats (diesel, petrol and electric), which account for approximately 54% of the total income. The weekly hired motor craft account for 27% and private sailing craft, including motorised sailing craft, 7%.

Table 6 Proposed Charges for the Navigation Area and Adjacent Waters in 2017/18

Commercial Fleet

Category	Proposed Charge	Number of Boats (30/09/16)	Total Income
		(00/00/10)	£000's
Weekly hired motor craft	£28.95 per m ²	789	£860.3
2. Day hired	£44.30 per m ²	251	£121.2
Day hired Electric	£30.90 per m ²	43	£15.0
4. MCA Passenger Boats and small	£38.10 per m ²	16	£24.0
passenger boats			
5. Motorised Sailing Craft	£23.50 per m ²	44	£24.2
6. Sailing Boats	£17.50 per m ²	102	£13.8
7. Houseboats	£14.95 per m ²	16	£10.7
8. Rowing, canoes etc.	£65.70	192	£12.6
Sub Total			£1,081.8
Other tolls (Trade plates, Hire Paddling			£13.3
scheme etc.)			
Predicted reduction in hire fleet			-£21.7
Total Income			£1,073.4

Private Fleet

Category	Proposed Charge	Number of Boats (Forecast March 16)	Total Income
			£000's
9. Motor Boats - petrol & diesel	£12.85 per m ²	6,384	£1,693.2
10. Motor Boats Electric	£10.00 per m ²	244	£17.3
11. Motorised Sailing Craft	£9.50 per m ²	1128	£161.0
12. Sailing Boats	£8.00 per m ²	1061	£62.5
13. Houseboats	£5.15 per m ²	58	£9.5
14. Rowing, canoes etc.	£32.85	1576	£51.8
Sub Total			£1,995.3
Other Toll (Work & Safety Boats, Youth			£44.7
Schemes, BCU, Wherries etc.)			
Short Visit Tolls			£39.8
Total Income			£2,079.8

Total Predicted Income

Other Income (Interest, Mutford Lock, Ski Permits, Boat licencing etc.)	£26.3
Total Navigation Income	£3,179.5

5 Evaluation and Risk Analysis

5.1 The impact of the proposed structure has been tested by replicating the 2016/17 charges using the new structure, and this is summarised in the Working Group's report. The calculations have been repeated using the proposed charges for 2017/18 and boat numbers for 2016/17. The results are shown in Table 7 below.

Table 7 Implications of the new structure for individual vessels.

	Category	Pay Less	Pay More
1.	Weekly Hire	189	600
2.	Day Hire	99	152
3.	Day Hire Electric	18	25
4.	MCA Passenger / Small Passenger	7	9
5.	Motorised Sailing Hire	10	34
6.	Sailing Boats Hire	81	21
7.	Houseboats Hire	2	14
8.	Rowing Hire	0	192
9.	Private Motor Boats	3009	3375
10.	Private Motor Boats Electric	214	30
11.	Private Motorised Sailing	807	321
12.	Private Sailing Boats	764	297
13.	Houseboats	57	1
14.	Rowing, Canoes etc.	0	1576

- 5.2 If implemented as set out above the effect of using a variable rather than a fixed and variable calculation would mean that the larger boats using the Broads would see an increase in their charges. Overall, with the provision of the rates in Table 6 applied, Table 7 shows that 44% of all the boats listed would see a reduction in their toll even with the overall increase in income. So for example the owners of 764 (72%) sailing boats would see a reduction in their charge even though there would be an increase in the total contribution from that category.
- 5.3 47% of the category with the largest number of boats, the private motor boats, would also experience a reduction in the toll. On the other hand 1,576 rowing, canoes and kayaks not affected by the structural changes would all see an increase of £0.97 as their contribution to the additional expenditure.
- 5.4 For commercial boats, 24% of the hire boats would experience a reduction in the charge for 2017/18. The big new boats, which are the most profitable, would pay more. For day boats, 40% would see a reduction.
- 5.5 When considering the impact of the changes, it is worth considering that the stakeholder survey research in 2014 (Insight Track) shows that the charges are a small part (9% on average, larger for small boats and smaller for bigger boats) of the cost of owning and maintaining a boat. Mooring/marina fees, maintenance and repair costs and fuel are all, on average, a bigger part of the

cost of owning a private boat. In the light of this, the proposed changes are not expected to have a significant impact on the number of large private boats in the area. The research showed that most private boat owners (70%) think they will own the same number of boats in the next five years (12% more; 9% fewer); in particular those in the age category 18-34 thought they were most likely to own more boats.

- 5.6 Any change to the tolls contains some element of risk. The Authority has minimised the impact of the changes by consulting the main boating organisations on several occasions, so that it can gauge the likely reaction to the reform of the structure. It has also modelled the impact, so that it has a good understanding of the boats that will be affected and the degree of increase/decrease in the charge for individual boats.
- 5.7 The proposals in this report represent a significant change in the charging structure for boats on the Broads. A judgement was made, using Insight Track's research findings, as to whether the proposals should be subject to an equality impact assessment. However, the research evidence, for example that for the average private boat owner the toll represents only 9% of the total costs of owning a boat, suggests that there will not be a disproportionate impact to any specific characteristic groups as a result of the toll review proposals.

Background papers: None

Author: John Packman, Emma Krelle, Bill Housden

Date of report: 12 October 2016

Broads Plan Objectives: None

Appendices: APPENDIX 1 – Tolls Working Group Report

APPENDIX 2 – Draft charges for 2017/18

Proposals for a fairer, simpler structure for tolls in the Broads navigation area and adjacent waters

Report of the Tolls Working Group 2016

Jacquie Burgess (Joint Chair)

Michael Whitaker (Joint Chair)

Kelvin Allen

Louis Baugh

Bill Dickson

Phil Durrant

Nicky Talbot

October 2016 Final

Executive Summary

Process: The seven members of the Tolls Working Group have comprehensively

reviewed the existing tolls structure. After consultation with key stakeholders they make the following recommendations for

consultation with the Navigation Committee and consideration by the

Broads Authority.

Context: The basis for the appropriate navigation charge is that the payment of

a toll buys the customer a time-limited right of access to the waterways

in the Broads.

Recommendation 1: New Guiding Principles for Tolls

The Broads Authority adopts a new set of Guiding Principles for Tolls based on:

- (i) The Authority's 'statutory responsibility';
- (ii) 'Flexibility';
- (iii) 'Fairness, based on economic costs and benefits';
- (iv) 'Simplicity'; and
- (v) 'Efficiency'

Recommendation 2: A simple charging structure

It is proposed that for each class of vessel (see Recommendation 3), the owner will pay a set amount per square metre. This moves away from using the fixed and variable element in the calculation of charges introduced in 1981 to a single, variable element related to the size of the vessel. Wherries, rowing boats, canoes and kayaks will pay a flat rate charge.

Recommendation 3: A flexible charging structure

It is proposed that different types of vessel in each of the two fleets, commercial and private, should be given independent costs per square metre. For example it is suggested that there should be a rate per square metre for weekly hired motor boats that is different from that for private motor boats. This would replace the current system of multipliers and discounts, and provide the Authority with the flexibility to respond to changes in the composition and number of boats in the different fleets.

Subsidiary Recommendations

- (i) Wherries should be charged a flat rate, to reduce their overall costs, promote their important cultural heritage and reflect their iconic status. (There are eight wherries on the Broads system as at October 2016.)
- (ii) Electric boating should continue to be encouraged through lower rates for private motor boats. However, any boats using diesel generators to power electric engines should be charged at the normal commercial/private motor boat rate.
- (iii) The current discount for early payment offered to the larger hire boat operators should be discontinued but the provision for staged payments should be retained.
- (iv) The non-display of toll plaques trial should be extended for a further year.

- (v) The charges for craft in adjacent waters should remain identical to those in the Broads Navigation Area to account for the interconnected relationship between the two.
- (vi) The charges for passing through Mutford Lock should recover the annual costs involved.
- (vii) The current charging policies for short visit tolls and boats removed from the Broads system should be retained.

1 Introduction

1.1 This is the report of the 2016 Tolls Working Group which was established in September 2015 by the Broads Authority to "review the current tolls structure". The Group comprised seven Broads Authority Members, five of whom were also Members of the Navigation Committee, and brought together a wide range of interests and experience.

MEMBER	ROLE	INTERESTS		
Prof J A Burgess	Joint Chairman	Chair, Broads Authority		
1 101 0 7 C Bargood	John Ghairman	toll payer; member NBYC		
		Chair, Navigation Committee		
Mr M Whitaker	Joint Chairman	Broads Authority member,		
		Chair BHBF, toll payer		
		Broads Authority member		
Mr K Allen	BA member	Navigation Committee		
		Broads Angling Strategy Group		
		Broads Authority member,		
Mr L Baugh	BA member	Finance Scrutiny & Audit		
		Committee		
Mr W A Dickson	Co-opted member, BA Member from 1.07.16	Navigation Committee, toll payer		
Mr P Durrant	BA member (until 31.03.16)	Broads Authority member, Navigation Committee. (Retained as a member of the Group until completion of work)		
Mrs N Talbot	Co-opted member; BA Member from 18.03.16	Navigation Committee, NSBA, toll payer, member NBYC		

1.2 The driver for the review came from the stakeholder research carried out by Insight Track¹ in 2014, which identified significant concerns about the hire boat multiplier amongst the commercial operators, as well as statistically representative findings on owners' views on the charges. This was followed up

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¹ Insight Track Ltd., a research company based in Norwich, was commissioned in 2014 to carry out surveys so as to provide a fact-base about private boat-owners, hire boat operators, residents and visitors in the Broads, in order to inform management decision-making (notably in respect to tolls planning and management),

by a Tolls Workshop in September 2015 which identified two main issues for investigation, namely whether:

- (i) a more flexible structure should be adopted for hire boats rather than the current system of multipliers and discounts linked to the private motor boat rate; and
- (ii) the present fixed plus variable calculation should be replaced by a variable calculation, based on the area of the vessel.
- 1.3 The Group (hereafter TR-16) met ten times (see Annexe 1 for details of the work programme) and has:
 - (i) reviewed the overarching strategic principles from 2012 and developed a new set of Guiding Principles;
 - (ii) examined closely the basis for the calculation of the navigation charges;
 - (iii) considered whether a more flexible system should replace the current arrangement of multipliers and discounts for different categories of vessels;
 - (iv) examined the charges in adjacent waters;
 - (v) reviewed the current discounts for early payments and discounts;
 - (vi) reviewed the trial instituted in February 2016 not to issue toll plaques;
 - (vi) considered the charges for the electric boats, boats with electric engines powered by diesel generators and the eight wherries; and,
 - (vii) examined short visit tolls, the charges for transiting Mutford Lock and policies on refunds for boats leaving the Broads.
- 1.4 This report will be presented to the Navigation Committee for its views on 27 October 2016 before the Broads Authority makes a decision on the matters at its meeting on 18 November.
- 1.5 The Broads Authority has regularly reviewed the structure for tolls as the number and type of boats has changed and the needs for expenditure in different areas have put pressures on the budget. Four major reviews have been carried out over the last 10 years and full documentation is available on the Authority's website. The reviews are referenced in this report in the following way:
 - 1. Tolls Working Group 2005 (TR-05)

Key stakeholder organisations took part in seven independently facilitated workshops to debate:

- (i) the structure and level of charges for a revised tolls system;
- (ii) the use of the tolls as a policy instrument; and
- (iii) the overall funding requirements for the maintenance of the navigation and provision of facilities for those using the waterways.

(See Broads Authority papers for 22 April 2005, agenda item 5).

2. Tolls Review 2008 (TR-08)

The 2008 review was a short process with three meetings held with a range of stakeholders. Issues were:

- (i) how to toll craft of different sizes;
- (ii) the hire boat multiplier;
- (iii) the need for 10% navigation reserves; and
- (iv) uncertainty about DEFRA funding.

(See report to Navigation Committee, 23 October 2008).

3. The Navigation Finance and Tolls Review Group 2009 (TR-09) This was a Member Group whose terms of reference were to:

- (i) review all aspects of navigation income and expenditure, setting a three year financial strategy;
- (ii) determine the relative changes for different size vessels; and
- (iii) discuss the future of the hire boat multiplier.

(See BA 20 November 2009, agenda item 14).

4. Tolls Working Group 2012 (TR-12)

This involved key stakeholder groups, was independently facilitated and met four times. After a good start when the current Principles and Criteria were agreed, there were significant differences of view between participants about the relative charges for vessels and the multiplier which could not be resolved.

(See BA, 23 November 2012, Agenda item 13).

1.6 From this history it can be seen that the two main issues identified in the 2015 Workshop, the hire boat multiplier and the relative charges for large and small craft, have been on the agendas for tolls reviews for the last decade. The TR-16 Member Group was committed to trying to resolve these issues, so that a new structure that could form the basis for the calculation of tolls for the foreseeable future. The Group started with a review of the underpinning principles before tackling the charging structure.

2 Guiding Principles for Tolls

- 2.1 TR-16 examined what lay behind the adoption of the 8 Guiding Principles and Criteria which underpin the current tolls structure. Ten 'attributes' of a good structure were first established in Tolls Review 2005 (TR-05) [BA, 22.04.2005, item 9, sect. 3.3 of Report appendix]. Several referred to the delivery of the Tolls service whilst three others linked the level of charge to the environmental impact of vessels; to the size of vessel with larger boats paying more than smaller; and to the volume of usage of the vessel.
- 2.2 TR-05 recast the 'multiplier', which had been developed originally in negotiation with the hire boat industry as a mechanism to generate additional income for extra facilities such as moorings, into a 'charge linked to usage'. The rationale for the multiplier was that hire boats used the Broads system more intensively

- than private boats and should, therefore, pay proportionately more towards its management. At the same time, the 2005 review noted the sensitivity of the multiplier to fluctuations in economic circumstances.
- 2.3 Following through to the Tolls Review in 2012 (TR-12), a draft set of Guiding Principles and Criteria were put forward to the Broads Authority for discussion as part of setting the 2013-14 Tolls [BA 23.11.12, item 13, Appendix 1]. The draft list was less comprehensive than that in TR-05 in that specific assessment tools were not included. There was also a change in the prioritisation of principles.
- 2.4 All eight draft guiding principles put forward by TR-12 represented discrete justifications for levying a toll on different classes of vessel. Principle 1 addressed the **size of vessel** and stated that larger boats should pay a higher toll than smaller boats because their impacts on the system were greater. Principle 2 was based on **usage of the navigation area:** owners of hire boats should pay more on the basis that their boats used the system and facilities more than private boats. Principles 3, 4 and 5 picked up the Broads Plan 2004 sustainable development principles, endorsing TR-05's 'environmental impact' and 'social impact' attributes while adding a new 'economic impact' principle.
- 2.5 TR-12 proposed two additional principles: P6 **Fairness** required that the Tolls structure should be 'justifiably and understandably fair when applied and encompass the full spectrum of users and uses'. P7 **Value for Money** required that charges should compare favourably with other waterways while also generating the required revenue.
- 2.6 TR-16 reviewed the existing lists of principles and attributes, concentrating on TR-12 as these underpinned the current tolls structure. The Group felt these should be simplified to provide a clearer strategic framework and a more robust mechanism for appraising new proposals for the tolls structure. Discussion focused on the fundamental principles that justified levying navigation charges. The aim of these principles was to provide a fair and simple framework and to recognize the value of the entire fleet to the Broads navigation.
- 2.7 There was agreement that tolls income should generate sufficient income to maintain the navigation system at a level that reflected and met the strategic purposes of the Broads Authority in terms of the requirements of the Broads Act. Equally, the Group agreed that navigation charges should be used to support policy developments, such as promoting greater sustainable use of the waterways although it was considered that such a principle should be used to incentivize good behaviour rather than to penalize either hire boat operators or private owners. The Group noted that relatively little robust evidence existed to date to demonstrate that offering incentives through toll charges materially affected the behaviour of toll payers.
- 2.8 They also noted that the navigation charges were required to maintain the navigation system for the area and, unlike the other major waterways in the UK, the Broads navigation was entirely funded by its users all of whom pay for its

maintenance and management. TR-16 agreed there should be a higher charge for commercial boats but debated whether the existing rationale (P2) that hire boats used the system and the facilities of the system more often than private boats was the right one. Members argued that it was more appropriate to base it on the direct economic benefit commercial operators obtain from using the system rather than level of use.

- 2.9 Five new Guiding Principles were developed under the headings of: Statutory Responsibility, Flexibility, Fairness, based on Economic Costs and Benefits, Simplicity and Efficiency. These principles were tested at two workshops with members and in written consultation with the Broads Hire Boat Federation and the Norfolk and Suffolk Boating Association. Most of the discussions were focused on Principle 3 Fairness, based on Economic Costs and Benefits. The key point that emerged was the need to be explicit about the basis for the transaction between the Broads Authority and its customers, i.e. the payment of a toll buys the customer a time-limited right of access to the Broads waterways, the Navigation Area and adjacent waters.
- 2.10 As with vehicle road tax, how often an individual boat owner chooses to exercise their right to use the facilities is entirely a personal matter. The Group therefore replaced the 'usage' principle used previously to justify the multiplier between the private and the commercial fleets. The new Principle 3 states that the direct economic benefit commercial operators derive from the Broads waterways should be used to justify higher tolls charges for the commercial fleet.

Recommendation 1

Guiding Principles to underpin the Tolls structure

- Navigation charges should generate sufficient income to maintain the navigation area for the purposes of navigation to such standard as appears to the Authority to be reasonably required and to take such steps to improve and develop the navigation area as the Authority thinks fit (Section 10 of the Broads Act 1988). ['STATUTORY RESPONSIBILITY']
- 2. Navigation charges should be used as a policy instrument, ensuring that the tolls structure is sufficiently flexible to protect the economic and social interests of those who live or work in the Broads. ['FLEXIBILITY']
- 3. In recognition of the direct economic benefit derived by the commercial fleet² from the Broads navigation, operators should pay more than private boat owners for an equivalent sized boat. ['FAIRNESS, BASED ON ECONOMIC COSTS AND BENEFITS']
- 4. The rationale and structure of navigation charges should be transparent and easily understood by all toll payers. ['SIMPLICITY']

² Commercial includes all those boats whose use generates an income for their owners, not just hire boats but also for example the ice cream boat.

- 5. The cost of collecting navigation charges should be as low as reasonably possible. ['EFFICIENCY']
- 3 Basis for the calculation of the charges: a simple charging structure
- 3.1 The structure of the Tolls has evolved over the last 30 years or so, with incremental changes being made at stages over this period. In 1981 the Port and Haven Commissioners made a fundamental change, moving from charges based on the tonnage of the vessel to charges based on the size of the boat in complete square metres using the overall length multiplied by the beam. This is the basis for the present charging structure.
- 3.2 The Commissioners were anxious to minimise the impact of this change and calculated the new charges based on **Fixed and Variable components**, the latter being a multiple of the size of the vessel in square metres, so that the differences with the tonnage charges were small. In 1981 the charge for a private motor vessel was calculated using a fixed amount of £8.80 plus £1.10 per complete square metre. Sailing vessels paid 50% of this rate £4.40 plus 55 pence per complete square metre.
- 3.3 The current structure is built on a set of relationships with private motor vessels as the base equalling 100%. A number of **discounts** are then applied, for example the rate for auxiliary yachts (i.e. sailing craft with an engine) is 75% of the motor vessel toll; and, for sailing and unpowered houseboats it is 50%.
- 3.4 The Tolls Workshop in September 2015 involving Broads Authority and Navigation Committee Members and representatives of British Marine, the Norfolk Hire Boat Federation and the Norfolk and Suffolk Boating Association, examined this element of the structure. It compared the current fixed and variable calculation with one based on a purely variable relationship. Under the fixed plus variable calculation smaller boats paid relatively more for their size than larger vessels. In the current year a small (5 m² and under) private motor craft pays £94.28 and large boats then pay an extra £9.70 for each additional square metre added.
- 3.5 It was noted that 90% of the tolls income came from motor boats (private as well as hire) as opposed to sailing craft. There were 6,462 private motor boats registered in 2014. In addition, in terms of private boats overall, the Broads had a 'small-boat' fleet with over half of boats under 18 m². The Group reviewed changes in the composition of the private boat fleet with respect to size, finding that over the last seven years the number of small private motor boats had fallen by 20% while the number of larger boats had increased (see Table 1).

Table 1 Private motor boat numbers by size

Size m²	2008	2009	2010	2011	2012	2013	2014	2015	△ 2008-15	%△ 2008-15
1-10	2292	2130	1930	1940	1866	1844	1828	1775	-517	-22.6%
11-20	1795	1923	1956	1991	1958	1983	1960	1950	+155	8.6%
21-30	1427	1487	1529	1566	1603	1614	1642	1630	+203	14.2%
31-40	736	765	800	814	819	865	865	893	+157	21.3%
41-50	283	294	289	296	304	319	343	364	+81	28.6%
51-60	39	46	44	51	60	63	65	65	+26	66.7%

- 3.6 The Group reviewed the Insight Track research findings, in particular the evidence on the relative importance of the tolls in the total annual cost of keeping a boat on the Broads. This evidence is important because it allowed an evaluation of the possible impacts of replacing the fixed and variable rate with a variable-only structure and the removal of discounts.
- 3.7 Taking the **Private Boat Owners (PBOs)** first, TR-16 took note of the statistically significant samples that Insight Track recruited to achieve its sample of 747 private boat owners (PBOs), drawn from the Authority's database of 10,797 PBOs.
 - a. The Authority's database shows that 77% of private boat owners (PBOs) own one boat and 23% own multiple boats. In the Insight Track sample, 68% of the sample of PBOs owned one boat, 18% owned two, 8% owned three, and 5% owned four or more vessels.
 - b. The Authority's data base shows that 83% of PBOs own a motor craft; 9% own a motorized sailing craft; 4% own a non-powered sailing craft; and 3% owned a rowing boat/canoe /kayak. To ensure a statistically representative sample to allow analysis, Insight Track interviewed more owners of auxiliary yachts (29% of total sample); rowing boats, etc. (26%); and non-powered sailing craft (18%).
 - c. The length of time that respondents had owned a boat on the Broads ranged from less than a year (6%), 1-5 years (26%); 5-10 years (18%); 10-15 years (15%), to more than 15 years (35%).
 - d. In the sample, 11% of respondents were aged between 18-34; 39% were aged between 35-54; and just under half (49%) aged over 55. The vast majority of PBOs in the sample were men (83%).
 - e. In terms of 'social grade', the majority of PBOs (56%) were within social category ABC1 (i.e. professional, managerial and clerical) and 37% within social categories C2DE category (skilled manual workers, manual workers, semi-skilled, unskilled, casual workers and non-workers, including pensioners).

- f. Gross household incomes varied accordingly, with 4% of PBOs recording incomes less than £15,500 a year, and 14% between £15,500-£24,999. The largest group, at 28%, fall within a gross household income category of £25,000-£49,999. At the upper end of the range, 11% of PBOS report a gross household income between £50,000-£74,999 and 11% were above this figure.
- g. PBOs were asked to provide details of the costs of owning a boat. Table 2 shows the costs reported by PBOs.

Table 2 Costs reported by Private Boat Owners (PBOs) of owning a boat.

Category of expenditure	Percentage
Mooring/marina fees	32%
Maintenance /repairs	29%
Fuel	11%
Broads Authority tolls	9%
Insurance	9%
Miscellaneous	7%
BSS compliance	2%

- 3.8 The three most significant costs for the private boat owner were mooring/marina fees (32%), maintenance and repairs (29%) and fuel (11%). The Broads Authority's tolls accounted for an average 9% of the annual cost. There were some minor fluctuations around this average: for boats less than 10 feet long the tolls accounted on average for 14% of total costs, for boats 10 19 feet long the figure was 12%, whilst for motorised sailing vessels the toll contributed 8% of total annual boat ownership costs.
- 3.9 The research showed there were no significant differences in terms of the proportion of total annual boat ownership costs attributed to tolls by demographic groups among the PBOs such as respondent age, social grade, etc.). The researchers reported that there was no clear or strong perception among PBOs as to whether the toll was better value for money for different sizes of boats. This suggested to TR-16 that the current structure is not sufficiently transparent.
- 3.10 Just over half of the PBOs agreed that BA toll represented good value for money but a quarter disagreed. Individual owners of larger, particularly nonpowered sailing boats, were less likely to agree the toll was good value for money.
- 3.11 Twenty five **Hire Boat Operators (HBOs)**, again a statistically significant sample, were interviewed over the phone by Insight Track researchers and asked the same questions as the PBOs to allow for comparisons to be made. Table 3 shows the proportion of total annual fleet running costs averaged across the sample.

Table 3 Costs reported by Hire Boat Operators (HBOs) of operating a boat

Category of expenditure	Percentage
Staff	35%
Misc. costs	12%
Maintenance /repairs	11%
Premises	11%
Broads Authority tolls	11%
Insurance	7%
Fuel	5%
Business rates	5%
New boat investment	3%

- 3.12 The majority of HBOs (56%) did not agree that the Broads Authority tolls were good value for money, while a further 36% were neutral on the question. One of the major issues for the HBOs was the multiplier, with 72% of interviewees not supporting it, and a further 20% expressing a neutral opinion. A number of HBO interviewees were also critical of other aspects of the Broads Authority performance in relation to the management of the navigation which TR-16 took into account in its deliberations. Particular weight was given to the BHBF advice that a substantial number of hire boats would be lost in 2016-17 as a consequence of yard closure and rationalization of the fleet.
- 3.13 The Group noted that a decision to implement the fixed and variable rate had been taken back in 1981 when the Port and Haven Commissioners changed from charges based on vessel tonnage to size of boat in complete square metres (see paras. 3.1-3.2 above). This was done for a political reason, i.e. to ensure the differences between the tonnage charges were small, rather than for any underlying structural reason. The fixed and variable calculation does not relate to different lines in the Authority's expenditure nor do they relate to fixed or variable costs. After extensive discussion, reviewing evidence from financial modelling of alternative approaches, and comparing Broads Authority charges with other UK inland waterways, the Member Group reached the conclusion that the current structure of fixed and variable rates should be replaced by a single variable rate.
- 3.14 In particular the Group was concerned that the current fixed and variable rate impacted more on small boats than on larger boats. The Group took note of the declining number of small boats being tolled over the last 7 years and the evidence that the charges for small boats on the Broads are higher than those on other inland waterways. At the same time, the data show a growing trend

of private individuals and hire boat operators purchasing and/or building larger vessels.

3.15 TR-16 considered that the adoption of a calculation for the charges based purely on the variable rate, as used by the Environment Agency on the River Thames, would be fairer. Smaller motor boats in particular would pay less, with the smallest private motor boats likely to pay between £60-£70 rather than the current £99.32, bringing the Broads more into line with comparable waterways. It was also thought that it would be easier to explain and justify the charges to toll payers; the calculation of the toll for any given boat would be transparent; and it would enable the Authority to respond to changes in the fleet in a more strategic way. Finally, TR-16 accepted that the administrative costs would be similar although there could be a potential marginal saving in time.

Recommendation 2

Basis for the Calculation of the Charges: A Simple Charging Structure

The Group is recommending that, in future, charges for most vessel types should be based entirely on a calculation based on the square metre size of the craft without a fixed element. The charge would be different for each class of vessel. Within each class, the owner will pay a set amount for each square metre. A small number of vessel classes (wherries; rowing boats, canoes and kayaks) will pay a flat rate charge, regardless of the block size of the vessel.

- 4 Basis for the calculation of the charges: a flexible charging structure
- 4.1 **The Multiplier.** One of the main drivers for the review of the tolls structure was the concern registered by the hire boat industry about the hire boat multiplier. The multiplier was first introduced in 1974, at the suggestion of the Broads Hire Boat Federation, to provide additional income to the Port and Haven Commissioners for the provision of extra facilities such as free moorings. Since that time the multiplier rate has varied and on other waterways where it exists, is now substantially below that on the Broads. In the year 2015-16 the annual toll for a hire vessel in the Broads was the equivalent private vessel toll multiplied by:
 - x 2.95 for day hire boats and passenger craft
 - x 2.55 for all other motorized craft and sailing craft or 11m² and above
 - x 2 for sailing dinghies and rowing boats of 10 m² and under.

The multiplier for the weekly hired craft was reduced to 2.62 in 2014-15.

4.2 The Insight Track research showed that the hire boat multiplier was well supported by around 70% of private boat owners (PBOs), on the basis of justifications such as 'hire boats are used more' (36%); 'they cause more damage' (19%); and hire boat operators (HBOs) 'make profit from use' (13%). Very small numbers of PBOs who did not support the multiplier cited reasons such as 'damages tourism/local economy' (2%), 'it's not fair to hire boat operators' (1%) and 'it damages profitability' (1%).

- 4.3 The HBOs expressed very different views about the multiplier to the Insight Track researchers, with 9 of the 25 interviewees saying they did not support it at all, and a further 9 saying they did not support it very much; 5 interviewees were 'neutral' and only 2 HBOs supported it 'quite a lot'. Combined with critical comments made by HBOs in other sections of the stakeholder survey research, these findings gave cause for concern.
- 4.4 A meeting between the Authority and the hire boat industry was held on 25th June 2015 to listen to the operators' concerns. Three options were debated at the subsequent workshop in September 2015: no change; changing the percentages (for example, that the multiplier should be reduced by 0.1% annually); and changing to a more flexible structure. The majority of Broads Authority Members supported the option of scrapping the multiplier altogether.
- 4.5 Categorisation of vessels. TR-16 reviewed the size of the boats and numbers within the commercial and private fleets and the interrelationship through the multiplier. The Group noted that the two fleets were very different: the majority of private boats were small. This is particularly true of sailing craft where 479 of the 1061 are 5m² or less in area and 764 are 8m² or less. In the case of private motor boats 3,725 are 20m² or smaller. The opposite was the case for the commercial craft where the larger weekly hired craft were the most significant component and the largest groupings around 37-38m² and 44-48m². After a period of stability, the number of weekly hired motor boats was once again in decline (Table 4). The temporary recovery in numbers was the result of the company 'Le Boat' bringing a total of 42 boats from Ireland, most of which arrived for the 2009/10 season but which have since gone. This year the total number of hired motor cruisers has dropped below 800 for the first time, even though it is reported that some yards have had an exceptionally good year.

Table 4 Number of Hired Motor Cruisers

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016
No.	803	843	878	904	894	869	842	821	789

- 4.6 TR-16 looked at the sensitivity of the present system which revolves around the rate for the private motor boat with a series of multipliers and discounts for other categories. This highlighted the sensitivity of changes to the private motor rate on other classes of vessel. It provided an illustration of how any reduction in the multiplier for hire boats would lead to a need to increase charges in the private fleet to offset the losses in income from the hire fleet. The Group felt the current structure was unnecessarily complicated, difficult to understand, and liable to produce financial shocks for the Broads Authority should the number of tolled hire boats continued to decline.
- 4.7 The Group concluded that there was a clear distinction to be drawn between 'commercial craft' and 'private craft' and between different categories of vessel within the two fleets. After careful analysis, TR-16 concluded that there would be considerable advantages in ascribing different costs per square metre to the different categories of vessels rather than using multipliers and

discounts. Different types of vessel in each fleet would be given independent costs per square metre. By removing all multipliers and discounts, the Authority would have greater flexibility to respond to changes in the composition and number of boats in the different fleets, as well as having a simpler and more transparent toll structure.

- 4.8 TR-16 concluded that the use of discounts complicated the calculation of charges. The Group appreciated that discounts had been introduced at various times over the last 15 years, usually with an aspiration to affect some kind of change in patterns of boat ownership and use. The Group sought confirmation that this had been an effective policy: however, there was little hard evidence to support this assumption.
- 4.9 Initial proposals for a reclassification of vessels in the two fleets were presented to the two member/stakeholder workshops held in April and June 2016 (see Appendix 1). The Group was asked to re-consider its initial recommendation that auxiliary yachts (i.e. sailing boats with an onboard engine) be included in the category of motor vessel and that the reduced charges for vessels using electric propulsion be discontinued.
- 4.10 Arguments put forward by workshop participants that auxiliary yachts were essentially sailing vessels which required the occasional use of an engine to navigate around the Broads system and for safety reasons, were accepted by TR-16. The proposal is to treat auxiliary yachts as a separate class of vessel with a different square metre charge rate.
- 4.11 The case of electric boats was discussed at length within the Group, and then again, following questions from stakeholders and members at the two workshops. The Group considered that the provision of additional infrastructure such as charging points could have a greater impact on the take-up of electric boats. But it was also acknowledged it was important that the Authority's commitment to promote sustainability should not be compromised. TR-16 decided to separate electric motor-powered motor boats as a different class of vessel, with a different square metre charge rate. After lengthy debate, the Group put auxiliary yachts which had an electric engine in the same category as 'motorized sailing vessels' as the primary method of propulsion for both was sail. This has the effect of removing the 'double discount' such vessels have received under the current structure.
- 4.12 Having reviewed and then rejected an internal argument for applying a 'commercial' operating license fee to replace the multiplier, TR-16 decided the most rational, simple, transparent and flexible tolls structure would be one in which each class of vessel both in the private fleet and the commercial fleet were tolled on the basis of a charge per square metre.
- 4.13 The Group concluded that 14 different categories of craft should be identified, as shown in Table 5. Each category would be allocated a different charge per square metre or a flat rate charge.

Table 5 Categories of vessel for charging purposes

Commercial Craft	Private Craft
Weekly Hired Motor Boats	9. Motor Boats (petrol and diesel)
2. Day Hire	10.Motor Boats Electric
3. Day Hire – Electric	11.Motorised Sailing Craft
4. MCA Passenger boats and BA– Small Passenger Boats	12.Sailing Boats
5. Motorised Sailing Craft	13. Houseboats
6. Sailing Boats	14.Rowing/canoes etc.
7. Houseboats	
8. Rowing/canoes etc.	

4.14 In practice, this would mean that all private or commercial boat owners would be able to follow a simple procedure to determine the toll to be charged for their vessel(s). Fourteen tables would be produced: Tables 1-8 would deal with classes of vessel in the Commercial Fleet and Tables 9-14 would deal with classes of vessel in the Private Fleet. Each Table would state what the block area/per m² charge is for that class of vessel. This new arrangement would dramatically reduce the number of individual charging categories from around 195 to around 60, demonstrating the degree of simplification involved.

Recommendation 3

Basis for the calculation of the charges: a flexible charging structure

Different types of vessel in each fleet should be given independent costs per square metre. For example, there will be a rate per square metre for weekly hired motor boats which will be different from that for private motor boats. This will replace the current arrangements of multipliers and discounts, and provide the Broads Authority with the flexibility to respond to changes in the composition and number of boats in the different fleets.

5. Subsidiary matters

5.1 In the course of its deliberations, TR-16 discussed a number of additional issues which are considered below.

5.2 Wherries

In the context of the proposed changes the Group examined the impact on different sized vessels. This highlighted the position of the eight wherries currently using the Broads navigation. These are currently classed as private vessels, as those wherries let-for-hire belong to not-for-profit organisations. However, they fit into three different categories: sailing, motorized sailing and motor. They also vary in size from 59 m² to 98m². The result of these two factors is that the tolls vary from £325 to £992. The Group recommended that

these were iconic vessels and that all eight wherries should be charged a flat rate and the rate set at a level to reduce the costs for most of the wherries.

5.3 Electric Propulsion

The Broads Authority has a history of supporting the development and use of electric boating. After extensive discussion, TR-16 recommended that, despite concerns about the limitations of the current technology, the Authority should continue to encourage the use of electric power through lower rates. However it was agreed any boats using diesel generators to power electric engines should be charged at the commercial/private motor boat rate as the consumption of diesel was apparently not very different to that of a conventional diesel powered vessel.

5.4 Boats sold out of the Broads system

The toll plaque is not transferable to any other vessel and no return of tolls is made in the event of cancellation of the plaque before the end of the tolls year. No refund is available should the vessel be sold and leave the Broads system. TR-16 supported the retention of this policy.

5.5 Adjacent Waters

The Group reviewed the charges for craft in adjacent waters. There are certain exemptions set out in the Broads Authority Act 2009. Recent court cases have clarified the position in respect of adjacent waters and made clear that the Authority has the powers to levy charges in adjacent waters and that the process it has used for setting those charges, to reflect the interconnected nature with the Broad system and the associated usage, is reasonable. Members considered and confirmed that the charges in these areas should continue to replicate those in the Navigation Area.

5.6 Early payment discount

The Group examined the basis for the early payment discount for the larger hire boat operators and came to the view that while the staged payment facility for these operators was reasonable, the discount could not be justified and should therefore be withdrawn.

5.7 Toll plaques

Following the successful trial of the non-display of toll plaques in 2016, TR-16 recommended the trial continues for a further year.

5.8 Short Visit Tolls

The Group examined the current method for calculating short visit tolls. A 14-day toll is approximately one-third of the full charge. A boat can have up to 28 days in short visits which approximates to two-thirds of the appropriate toll. The Group concluded this was still a sensible approach. It is therefore recommended that the cost of a short visit toll should be on a similar basis as it is currently. However, it was noted that with the proposed structural changes there is likely to be a reduction in short visit income as most short visits are by the smallest size category of boats of under 5 square metres.

5.9 Mutford Lock

The current fee for passage through Mutford Lock is £13; an increase from £12 charged in 2015/16. A summary of the income over past 5 years is:

Table 6 Income from Mutford Lock

Year	Income			
2015/16	£ 5,436			
2014/15	£ 6,523			
2013/14	£ 9,350			
2012/13	£ 8,239			
2011/12	£ 7,673			

5.10 The current annual maintenance budget (including operation fees) is £18,000. The Authority also puts £25,000 from navigation income annually into the Mutford Lock reserve fund. Therefore 30% of annual costs was covered by income from the Lock last year. The Group considered a range of possible charging scenarios based on the 600 lock passages annually. These are shown in Table 7 below.

Table 7 Charging options for Mutford Lock

Current Fee	£ 13
Passage income to balance current operation and maintenance cost	£ 30
Passage income to balance with current operation and maintenance cost and contribution to reserves	£ 72
Passage income to balance with operation and maintenance cost (if operation increased to £20,000) and contribution to reserves	£ 93
**Free passage through the lock, as a trial, to see if there is an increase in short visits toll income. Navigation expenditure to absorb running costs.	£0

^{**} Short visit toll books and receipts are issued to the Harbour Master at Oulton Broad who then splits them between the Yacht Station and Lock Office. No distinction is made in the receipt book as to which office issues the licence. We are unable to accurately state which licences relate to vessels passing through the lock.

5.11 The Members recommended that the income should ideally balance the annual costs of operation, i.e. approximately £30 for a one way passage and £45 for a return ticket. In order to encourage some owners to use this access to the Broads more frequently, a multi-trip discount should be investigated.

6. Evaluation of Proposals

- 6.1 TR-16 has evaluated its proposals as they have developed by testing them against the proposed Guiding Principles. This has been an iterative process with minor modifications made to clarify the meaning of the Principles whilst questioning, rejecting, adapting or accepting proposals according to how well they express the Principles.
- 6.2 A more formal evaluation was been undertaken by modelling the two primary recommendations and examining the implications for individual boats. A test frame was developed using the same boat numbers used a year ago to formulate the recommendations on charging for 2016-17 and maintaining the same level of income. Income within the 14 proposed boat categories was also kept at similar levels. Different rates per square metre were tested, such that changes in the toll charge for any individual boat were kept below 50%. This showed that based on the identical level of income overall, the number of boats seeing a reduction in the charges would exceed those seeing an increase.

Category	Pay Less	Pay More
Weekly Hire	417	395
Day Hire	146	100
Private Motor Boats	3337	3106
Private Sailing Boats	850	302
Private Motorised Sailing	904	142
Private Electric Motorised Sailing	19	88

6.3 TR-16 judged that overall and in the light of the research findings from Insight Track the changes would be affordable for the majority of boat owners and could encourage more small boat use.

7. Consultations

7.1 The Group has consulted with Members of the Broads Authority, its Navigation Committee, representatives of key stakeholder organisations and private boat owners. Consultation has included:

7.2 Stakeholder Survey

The evidence from the Insight Track research has been crucial in getting a handle on factual evidence on the costs of owning a boat and the level of usage. The findings have been widely shared.

7.3 Tolls Workshop in September 2015

This critical event included contributions from the Broads Hire Boat Federation (BHBF), British Marine, and the Norfolk and Suffolk Boating Association (NSBA). This identified the key issues and established a degree of consensus about the direction of travel.

7.4 Tolls Workshop in April 2016

A second workshop was held with Members on 21 April 2016 at which initial reactions and views were sought on the outline proposals from Member Working Group. There was widespread support for the changes being proposed but the Group was asked to consider particular points in further detail – notably, the wording of Guiding Principle 3; the proposals for dealing with electric/hybrid vessels; and the categorization of auxiliary sailing craft.

7.5 Tolls Workshop in June 2016

A further workshop for key stakeholders was held on 14 June 2016 to:

- Update stakeholders on progress made by TR-16
- Seek views on the revised set of principles
- Seek feedback on the main proposals being developed by TR-16

7.6 Comments Received

Representatives from the BHBF, the NSBA and other external stakeholder organisations were invited to submit their comments on the draft proposals by the end of July 2016. Responses were received from the BHBF, NSBA and Broads Angling Strategy Group (BASG).

- 7.7 The **BASG** welcomed the proposed changes and the "removal of the fixed charge which had resulted in higher costs for the ownership of small craft under 10 square metres representing 28% of the private craft fleet". The BASG was concerned about the availability of facilities for small boats, slipways in particular and suggested that "any reduction in charges for small craft could be offset and used to create a specific improvement fund for implementing improved slipway access. … This fund would be voluntary in nature, but part of the tolls collection."
- 7.8 TR-16 welcomed the response of BASG and was noted that under the new proposals, Broads tolls would be more directly comparable with those applied elsewhere on East Anglian waterways, particularly for small boats. The BASG idea of a voluntary fund to support the installation of slipways was discussed but TR-16 thought it could not be included as a proposal within this review and needed further consideration.
- 7.9 The **Broads Hire Boat Federation (BHBF)** "welcomed the proposed simplification of the tolls charging structure, the decoupling of the rates for hire and private craft and the flexibility that the structure would provide to react to changing circumstances in the future, particularly the size and makeup of the fleets."
- 7.10 The BHBF "queried whether full consideration was given to the opportunity to separate single screw and twin screw motor boats with a view to levying higher charges on the latter due to the perceived unsuitability for general Broads cruising and higher impact on the environment e.g. speed, wash draft?"

- 7.11 As this second point primarily related to private boats the NSBA was consulted on the proposition. The suggestion was not supported by the Association's officers and TR-16 took the view that it ran counter to the ambition for a simpler system. In addition larger boats, which tend to be those with twin screws, would already be charged a higher toll under the new proposals.
- 7.12 The **NSBA** participated in the 2 interim workshops (24 April and 14 June 2016) and the Association's key points were re-affirmed in their letter of 19 July 2016. The Group met Officers of the NSBA and the BHBF on 2nd September to discuss their concerns and feedback.
- 7.13 The suggestions made by NSBA to help clarify the proposed principles so the tolls can be better judged against them were very helpful and the majority have been incorporated in the Guiding Principles being presented for consideration in this report.
- 7.14 In its letter of 19 July 2016, the NSBA says they do not agree [the proposed structure] is a better system than one including a fixed base element and believe it is contrary to the objective of fairness. Their case is based on 4 points which had been heard and discussed in both workshops exploring the TR-16 proposals, and were expressed in their letter of 19 July as follows:
 - a) A fixed element recognises that some costs are not dependent on the size of the vessel. That element should be fixed on the basis that each vessel shares equally in the fixed costs incurred in respect of all vessels, regardless of size, such as the costs of administering the tolls system and the costs of the navigational size of the ranger service.
 - b) Even with a fixed element, by adopting an additional amount per square metre, the toll calculation is still simple to understand.
 - c) The indicated reduction in tolls for small boats (possibly over 62% lower) is unnecessarily generous.
 - d) Larger sailing cruisers, an important part of the local heritage of Broadland, will see significant increases (possibly almost 40% more).
- 7.15 As shown in Section 3 above, TR-16 discussed at length how the 'fixed' and 'variable' elements of the toll had arisen. Officers explained that there had never been an assumption or an accounting principle that allocated the 'fixed' component of the toll against specific items of the Authority's navigation expenditure. Rather, the total annual income from boat tolls is allocated according to the policy needs and strategic purposes as agreed by the Broads Authority. By moving to a single variable rate for the charge, TR-16 remains firm in its view that this is a simpler, more easily understood structure, not least because it clarifies the basis upon which navigation income and expenditure is determined.
- 7.16 The NSBA's perspectives on the fairness of the new proposals in relation to the current structure have also been discussed in depth by TR-16 and at the two workshops. This is a matter of judgement. The Group's view is that the current structure has an unjustified bias against small boats. As the evidence

presented in Section 3 above shows, the tolls represents 14% of total annual boat costs for the smallest boats, compared with the 9% average over the whole fleet. The smallest boats represent the segment of the Broads fleet in steepest decline. The TR-16 group queried the NSBA estimate of a 62% reduction; financial modelling showed the smallest motor boats, instead of paying around £100 per annum would, under TR-16 proposals, be paying in the order of £60-£70, likely to be a 30-40% reduction. This would also bring the Authority's charge for these vessels more in line with charges elsewhere.

- 7.17 NSBA's point about the important contribution that river cruisers make to the local heritage of Broadland was supported by other participants in the two workshops. TR-16 took note of these views and have amended their initial proposals so that these boats are treated more favourably than other boats with an engine (see Section 4 above). The majority of auxiliary yachts will see either reductions or fairly modest increases in their tolls. There are currently 107 electric powered auxiliary yachts that are in receipt of a double discount under the present structure, one discount for being a yacht and a second for having electric propulsion. TR-16 decided to remove what it considered was an anomaly and therefore in this group, 19 vessels will see a reduction in their charge while the majority will see an increase.
- 7.18 In conclusion, the TR-16 has taken NSBA arguments into account during its discussions and, as reflected above, has made some adjustments to its proposals in response.
- 7.19 A report on the proposed new tolls structure was considered by the Authority's Finance, Scrutiny and Audit Committee, on 5 July 2016. The Committee resolved to support both the Guiding Principles and the new Proposals.
- 7.20 At its final meeting on 17 August 2016, TR-16 considered feedback from the BHBF, the NSBA and the BASG; examined a number of outstanding minor matters; and reviewed the outline structure for the Draft Report to be presented to the Navigation Committee.

8. Conclusions

8.1 At the outset of the process, it was envisaged that only a few meetings of this Tolls Working Group would be required to come to a decision about the structure of the tolls. In practice it took ten meetings and nearly a year. This was necessary because of the complex inter-related nature of the issues under discussion and the importance of engaging other Members and key stakeholders in the process. The Group has carefully considered the thorny problems of the hire boat multiplier and the fixed and variable calculation and ot commends its conclusions for consultation with the Navigation Committee and decision by the Broads Authority.

Annexe 1: List of items discussed at the Tolls Working Group Meetings

Date	Meeting	Main items discussed
5.10.15	1	Reviewed outcomes from Tolls Workshop; Terms of Reference; scoped the context and determined the breadth of the enquiry; reviewed lessons from 2005, 2008, 2009 and 2012 Tolls Reviews; examined the fixed and variable elements in the navigation charges.
6.11.15	2	Examined 2012 Tolls Review <i>Principles, Criteria and Attributes</i> and performance of current Tolls system; discussed what standards of service could be provided from navigation charge income; decided to explore potential changes to the existing structure on the basis of raising sufficient income for current level of service.
1.12.15	3	Approved Amended Terms of Reference; accepted draft, revised Principles as the basis for the tolls structure; compared the existing fixed and variable method of calculation with a purely variable arrangement; examined justifications for the hire boat multiplier.
15.01.16	4	Considered emerging proposal that the toll could be based solely on a fixed square metre charge for all boats; tested on private motor cruiser fleet; questioned the effectiveness of current discounts; completed the same analysis for the commercial fleet; discussed stakeholder engagement strategy.
25.02.16	5	Continued analysis of the potential impact of a single variable rate per square metre as the basis for the charges; detailed consideration of levels of charges for different types of craft including sailing craft, electric boats, wherries and house boats; debated whether to recommend a single or staged introduction of new structure.
21.03.16	6	Continued detailed analysis of impacts of TRG's proposals on both the private and hire fleets; agreed to hold second workshop to seek views of all B.A. Members /co-opted Members and invited stakeholders on the draft proposals.
13.04.16	7	Decided the format and presentations for 2 nd Tolls Workshop.
21.04.16	2 nd Tolls Workshop	AIMS: to present the draft proposals of the TRG, seeking feedback on the 5 new Principles; the emerging new tolls structure; possible impacts of the new structure on the B.A.'s Financial Strategy of maintaining the current level of service.
6.05.16	8	Addressed feedback from the Members' workshop, including amendments to the draft set of Principles, and the categorisation of different vessels in the private and hire fleets.
23.05.16	9	Further analysis of categorisation of commercial and private craft; discussed administration of the new structure; discussed format and presentations for a tolls workshop for key stakeholder organisations.
14.06.16	3 rd Tolls Workshop	Presented revised principles and proposals to Members/co-opted Members and key stakeholder organisations for discussion and feedback; invited written feedback from key stakeholders.
05.07.16	FSAC	Proposals for new tolls structure considered by FSAC and approved.
17.08.16	10	Discussed all points raised by BHBF/ BASG / NSBA in their written feedback; addressed outstanding issues – charges in adjacent waters; discounts for early payments/refunds; visiting tolls; plaques and registration marks; considered timescale for submitting TRG report to Navigation Committee and the full Authority; and tolls setting for 2017.

Schedule of Draft Charges for 2017/18

Hired Craft

Category 1 Weekly Hire Craft £28.95 per metre²

Category 2 Day Hired boats £44.30 per metre²

Category 3 Day hired electric £30.90 per metre²

Category 4 MCA Passenger Boats and small passenger boats £38.10 per metre²

Category 5 Motorised Sailing craft for hire £23.50 per metre²

Category 6 Sailing Boats for Hire £17.50 per metre²

Category 7 Houseboats for hire £14.95 per metre²

Category 8 Rowing boats, canoes etc. for hire £65.70 per boat

Private Craft

Category 9 Motor Boats – petrol and diesel £12.85 per metre²

Category 10 Motor Boats – electric £10.00 per metre²

Category 11 Motorised sailing craft £9.50 per metre²

Category 12 Sailing Craft £8.00 per metre²

Category 13 Houseboats £5.15 per metre²

Category 14 Rowing boats, canoes etc. £32.85 per boat

Category 1 Weekly Hired Motor Craft - charged at £28.95 per square metre

Size in Meter ²	Number of craft	Toll Paid (£) in 2016/17	Toll (£) 16/17 under new structure	Difference in cash (£) terms	Proposed toll (£) for 2017/18	Difference in cash (£) terms
12	11	435.69	337.20	-98.49	347.40	-88.29
13	3	461.75	365.30	-96.45	376.35	-85.40
15	8	512.11	421.50	-90.62	434.25	-77.86
17	1	560.72	477.70	-83.02	492.15	-68.57
18	5	585.02	505.80	-79.22	521.10	-63.92
19	10	609.32	533.90	-75.42	550.05	-59.27
20	15	633.62	562.00	-71.62	579.00	-54.62
21	9	657.92	590.10	-67.83	607.95	-49.97
22	17	682.22	618.20	-64.03	636.90	-45.32
23	10	706.52	646.30	-60.23	665.85	-40.67
24	3	730.83	674.40	-56.43	694.80	-36.03
25	4	755.13	702.50	-52.63	723.75	-31.38
26	5	779.43	730.60	-48.83	752.70	-26.73
27	9	803.73	758.70	-45.03	781.65	-22.08
28	37	828.03	786.80	-41.24	810.60	-17.43
29	10	852.33	814.90	-37.44	839.55	-12.78
30	19	876.64	843.00	-33.64	868.50	-8.14
31	13	900.94	871.10	-29.84	897.45	-3.49
32	11	925.24	899.20	-26.04	926.40	1.16
33	21	949.54	927.30	-22.24	955.35	5.81
34	17	973.84	955.40	-18.44	984.30	10.46
35	23	998.14	983.50	-14.65	1013.25	15.11

36	20	1022.44	1011.60	-10.85	1042.20	19.76
37	73	1046.75	1039.70	-7.05	1071.15	24.40
38	59	1071.05	1067.80	-3.25	1100.10	29.05
39	26	1095.35	1095.90	0.55	1129.05	33.70
40	20	1119.65	1124.00	4.35	1158.00	38.35
41	19	1143.95	1152.10	8.14	1186.95	43.00
42	23	1168.25	1180.20	11.94	1215.90	47.65
43	20	1192.55	1208.30	15.74	1244.85	52.30
44	55	1216.86	1236.40	19.54	1273.80	56.94
45	10	1241.16	1264.50	23.34	1302.75	61.59
46	57	1265.46	1292.60	27.14	1331.70	66.24
47	11	1289.76	1320.70	30.94	1360.65	70.89
48	59	1314.06	1348.80	34.73	1389.60	75.54
49	5	1338.36	1376.90	38.53	1418.55	80.19
50	30	1362.67	1405.00	42.33	1447.50	84.83
51	16	1386.97	1433.10	46.13	1476.45	89.48
52	19	1411.27	1461.20	49.93	1505.40	94.13
54	2	1459.87	1517.40	57.53	1563.30	103.43
40	Diesel powered generator - 1 Diesel	783.76	1124.00	340.24	1158.00	374.24
48	powered generator - 3	919.85	1348.80	428.95	1389.60	469.75

Category 2 Day Hired boats £44.30 per metre²

Size in Meter ²	Number of craft	Toll Paid (£) in 2016/17	Toll (£) 16/17 under new structure	Difference in cash (£) terms	Proposed toll (£) for 2017/18	Difference in cash (£) terms
5	4	292.99	215.00	-77.99	221.50	-71.49
6	2	323.14	258.00	-65.14	265.80	-57.34
7	3	353.29	301.00	-52.29	310.10	-43.19
8	17	383.44	344.00	-39.44	354.40	-29.04
9	27	413.59	387.00	-26.59	398.70	-14.89
10	46	443.74	430.00	-13.74	443.00	-0.74
11	52	473.89	473.00	-0.89	487.30	13.41
12	71	504.04	516.00	11.96	531.60	27.56
13	13	534.19	559.00	24.81	575.90	41.71
14	5	564.34	602.00	37.67	620.20	55.86
15	6	592.45	645.00	52.55	664.50	72.05
16	2	620.56	688.00	67.44	708.80	88.24
17	1	648.68	731.00	82.32	753.10	104.42
21	2	761.13	903.00	141.87	930.30	169.17

Category 3 Day hired electric boats £30.90 per metre²

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Size in Meter ²	Number of craft	Toll Paid (£) in 2016/17	Toll (£) 16/17 under new structure	Difference in cash (£) terms	Proposed toll (£) for 2017/18	Difference in cash (£) terms	
7	3	247.30	210.00	-37.30	216.30	-31.00	
9	3	289.51	270.00	-19.51	278.10	-11.41	
10	12	310.62	300.00	-10.62	309.00	-1.62	
11	9	331.72	330.00	-1.72	339.90	8.18	
12	6	352.83	360.00	7.17	370.80	17.97	
14	4	395.03	420.00	24.97	432.60	37.57	
15	6	414.71	450.00	35.29	463.50	48.79	

Category 4 MCA Passenger Boats and small passenger boats £38.10 per metre²

Size in Meter ²	Number of craft	Toll Paid (£) in 2016/17	Toll (£) 16/17 under new structure	Difference in cash (£) terms	Proposed toll (£) for 2017/18	Difference in cash (£) terms
5	1	292.99	185.00	-107.99	190.50	-102.49
6	1	323.14	222.00	-101.14	228.60	-94.54
8	1	383.44	296.00	-87.44	304.80	-78.64
9	2	413.59	333.00	-80.59	342.90	-70.69
	1					
10	(Electric)	311.45	300.00	-11.45	309.00	-2.45
16	1	620.56	592.00	-28.56	609.60	-10.96
18	1	676.79	666.00	-10.79	685.80	9.01
23	2	817.36	851.00	33.64	876.30	58.94
72	2	2194.92	2664.00	469.08	2743.20	548.28
84	1	2532.28	3108.00	575.72	3200.40	668.12
89	2	2672.85	3293.00	620.15	3390.90	718.05
98	1	2925.87	3626.00	700.13	3733.80	807.93

Category 5 Motorised Sailing craft for hire £23.50 per metre²

Size in Meter ²	Number of craft	Toll Paid (£) in 2016/17	Toll (£) 16/17 under new structure	Difference in cash (£) terms	Proposed toll (£) for 2017/18	Difference in cash (£) terms
12	1	336.35	273.60	-62.74	282.00	-54.35
13	1	350.19	296.40	-53.79	305.50	-44.69
15	1	382.22	342.00	-40.22	352.50	-29.72
16	3	400.40	364.80	-35.60	376.00	-24.40
17	1	418.58	387.60	-30.98	399.50	-19.08
18	3	436.76	410.40	-26.36	423.00	-13.76
21	4	491.31	478.80	-12.51	493.50	2.19
22	1	509.49	501.60	-7.89	517.00	7.51

23	4	527.67	524.40	-3.27	540.50	12.83
24	3	545.85	547.20	1.35	564.00	18.15
25	8	564.03	570.00	5.97	587.50	23.47
26	8	582.22	592.80	10.58	611.00	28.78
29	1	636.76	661.20	24.44	681.50	44.74
30	2	654.94	684.00	29.06	705.00	50.06
34	1	727.67	775.20	47.53	799.00	71.33
35	2	745.85	798.00	52.15	822.50	76.65

Category 6 Sailing Boats for Hire £17.50 per metre²

Size in Meter ²	Number of craft	Toll Paid (£) in 2016/17	Toll (£) 16/17 under new structure	Difference in cash (£) terms	Proposed toll (£) for 2017/18	Difference in cash (£) terms
5	70	99.32	85.00	-14.32	87.50	-11.82
6	1	109.54	102.00	-7.54	105.00	-4.54
8	1	129.98	136.00	6.02	140.00	10.02
10	4	150.42	170.00	19.58	175.00	24.58
11	10	204.82	187.00	-17.82	192.50	-12.32
14	2	243.91	238.00	-5.91	245.00	1.09
16	10	268.23	272.00	3.77	280.00	11.77
22	4	341.22	374.00	32.78	385.00	43.78

Category 7 Houseboats for hire £14.95 per metre²

Size in Meter ²	Number of craft	Toll Paid (£) in 2016/17	Toll (£) 16/17 under new structure	Difference in cash (£) terms	Proposed toll (£) for 2017/18	Difference in cash (£) terms
23	2	353.38	333.50	-19.88	343.85	-9.53
29	1	426.36	420.50	-5.86	433.55	7.19
31	1	450.69	449.50	-1.19	463.45	12.76
36	4	511.50	522.00	10.50	538.20	26.70
40	2	560.16	580.00	19.84	598.00	37.84
41	1	572.32	594.50	22.18	612.95	40.63
43	4	596.65	623.50	26.85	642.85	46.20
176	1	2214.39	2552.00	337.61	2631.20	416.81

Category 8 Rowing boats, canoes etc. for hire £65.70 per boat

Size in Meter ²	Number of craft	Toll Paid (£) in 2016/17	Toll (£) 16/17 under new structure	Difference in cash (£) terms	Proposed toll (£) for 2017/18	Difference in cash (£) terms
All	192	63.76	63.76	0.00	65.70	1.94

Category 9 Private Motor Boats – petrol and diesel £12.85 per metre²

			Toll (C)			
Size in	Number	Toll Paid (£)	Toll (£) 16/17 under	Difference	Proposed	Difference
Meter ²	of craft	in 2016/17	new	in cash (£)	toll (£) for	in cash (£)
			structure	terms	2017/18	terms
5	662	99.32	62.35	-36.97	64.25	-35.07
6	226	109.54	74.82	-34.72	77.10	-32.44
7	168	119.76	87.29	-32.47	89.95	-29.81
8	147	129.98	99.76	-30.22	102.80	-27.18
9	131	140.20	112.23	-27.97	115.65	-24.55
10	169	150.42	124.70	-25.72	128.50	-21.92
11	256	160.64	137.17	-23.47	141.35	-19.29
12	271	170.86	149.64	-21.22	154.20	-16.66
13	163	181.08	162.11	-18.97	167.05	-14.03
14	199	191.30	174.58	-16.72	179.90	-11.40
15	268	200.83	187.05	-13.78	192.75	-8.08
16	221	210.36	199.52	-10.84	205.60	-4.76
17	128	219.89	211.99	-7.90	218.45	-1.44
18	147	229.42	224.46	-4.96	231.30	1.88
19	103	238.95	236.93	-2.02	244.15	5.20
20	142	248.48	249.40	0.92	257.00	8.52
21	201	258.01	261.87	3.86	269.85	11.84
22	344	267.54	274.34	6.80	282.70	15.16
23	251	277.07	286.81	9.74	295.55	18.48
24	95	286.60	299.28	12.68	308.40	21.80
25	87	296.13	311.75	15.62	321.25	25.12
26	101	305.66	324.22	18.56	334.10	28.44
27	131	315.19	336.69	21.50	346.95	31.76
28	176	324.72	349.16	24.44	359.80	35.08
29	124	334.25	361.63	27.38	372.65	38.40
30	111	343.78	374.10	30.32	385.50	41.72
31	87	353.31	386.57	33.26	398.35	45.04
32	72	362.84	399.04	36.20	411.20	48.36
33	110	372.37	411.51	39.14	424.05	51.68
34	88	381.90	423.98	42.08	436.90	55.00
35	105	391.43	436.45	45.02	449.75	58.32
36	66	400.96	448.92	47.96	462.60	61.64
37	98	410.49	461.39	50.90	475.45	64.96
38	110	420.02	473.86	53.84	488.30	68.28
39	80	429.55	486.33	56.78	501.15	71.60
40	71	439.08	498.80	59.72	514.00	74.92
41	94	448.61	511.27	62.66	526.85	78.24
42	77	458.14	523.74	65.60	539.70	81.56
43	36	467.67	536.21	68.54	552.55	84.88
44	23	477.20	548.68	71.48	565.40	88.20
		•	•			

45 46	14 61	486.73	561.15	74.42	578.25	04.50
	61		555	77.72	376.23	91.52
	01	496.26	573.62	77.36	591.10	94.84
47	27	505.79	586.09	80.30	603.95	98.16
48	25	515.32	598.56	83.24	616.80	101.48
49	16	524.85	611.03	86.18	629.65	104.80
50	9	534.38	623.50	89.12	642.50	108.12
51	10	543.91	635.97	92.06	655.35	111.44
52	17	553.44	648.44	95.00	668.20	114.76
53	3	562.97	660.91	97.94	681.05	118.08
54	16	572.50	673.38	100.88	693.90	121.40
55	11	582.03	685.85	103.82	706.75	124.72
56	2	591.56	698.32	106.76	719.60	128.04
57	4	601.09	710.79	109.70	732.45	131.36
60	5	629.68	748.20	118.52	771.00	141.32
62	4	648.74	773.14	124.40	796.70	147.96
63	4	658.27	785.61	127.34	809.55	151.28
64	2	667.80	798.08	130.28	822.40	154.60
65	1	677.33	810.55	133.22	835.25	157.92
67	1	696.39	835.49	139.10	860.95	164.56
69	3	715.45	860.43	144.98	886.65	171.20
70	2	724.98	872.90	147.92	899.50	174.52
71	1	734.51	885.37	150.86	912.35	177.84
76	1	782.16	947.72	165.56	976.60	194.44
84	1	858.40	1047.48	189.08	1079.40	221.00
86	2	877.46	1072.42	194.96	1105.10	227.64
94	1	953.70	1172.18	218.48	1207.90	254.20
96	1	972.76	1197.12	224.36	1233.60	260.84
105	1	1058.53	1309.35	250.82	1349.25	290.72

Category 10 Private Motor Boats – electric £10.00 per metre²

Size in Meter ²	Number of craft	Toll Paid (£) in 2016/17	Toll (£) 16/17 under new structure	Difference in cash (£) terms	Proposed toll (£) for 2017/18	Difference in cash (£) terms
5	160	69.52	48.75	-20.77	50.00	-19.52
6	15	76.68	58.50	-18.18	60.00	-16.68
7	10	83.83	68.25	-15.58	70.00	-13.83
8	8	90.99	78.00	-12.99	80.00	-10.99
9	10	98.14	87.75	-10.39	90.00	-8.14
10	3	105.29	97.50	-7.79	100.00	-5.29
11	8	112.45	107.25	-5.20	110.00	-2.45
12	4	119.60	117.00	-2.60	120.00	0.40
13	7	126.76	126.75	-0.01	130.00	3.24
14	4	133.91	136.50	2.59	140.00	6.09

15	2	140.58	146.25	5.67	150.00	9.42
16	2	147.25	156.00	8.75	160.00	12.75
17	1	153.92	165.75	11.83	170.00	16.08
18	1	160.59	175.50	14.91	180.00	19.41
19	1	167.27	185.25	17.99	190.00	22.74
21	1	180.61	204.75	24.14	210.00	29.39
22	4	187.28	214.50	27.22	220.00	32.72
23	1	193.95	224.25	30.30	230.00	36.05
28	1	227.30	273.00	45.70	280.00	52.70
30	1	240.65	292.50	51.85	300.00	59.35

Category 11 Motorised sailing craft £9.50 per metre²

Size in Meter ²	Number of craft	Toll Paid (£) in 2016/17	Toll (£) 16/17 under new structure	Difference in cash (£) terms	Proposed toll (£) for 2017/18	Difference in cash (£) terms
6	15	99.32	55.50	-43.82	57.00	-42.32
7	16	104.75	64.75	-40.00	66.50	-38.25
8	41	110.18	74.00	-36.18	76.00	-34.18
9	21	115.61	83.25	-32.36	85.50	-30.11
10	87	121.04	92.50	-28.54	95.00	-26.04
11	83	126.47	101.75	-24.72	104.50	-21.97
12	88	131.90	111.00	-20.90	114.00	-17.90
13	70	137.33	120.25	-17.08	123.50	-13.83
14	75	142.76	129.50	-13.26	133.00	-9.76
15	67	149.89	138.75	-11.14	142.50	-7.39
16	56	157.02	148.00	-9.02	152.00	-5.02
17	116	164.15	157.25	-6.90	161.50	-2.65
18	56	171.28	166.50	-4.78	171.00	-0.28
19	19	178.41	175.75	-2.66	180.50	2.09
20	70	185.54	185.00	-0.54	190.00	4.46
21	37	192.67	194.25	1.58	199.50	6.83
22	25	199.80	203.50	3.70	209.00	9.20
23	16	206.93	212.75	5.82	218.50	11.57
24	5	214.06	222.00	7.94	228.00	13.94
25	17	221.19	231.25	10.06	237.50	16.31
26	16	228.32	240.50	12.18	247.00	18.68
27	7	235.45	249.75	14.30	256.50	21.05
28	9	242.58	259.00	16.42	266.00	23.42
29	5	249.71	268.25	18.54	275.50	25.79
30	3	256.84	277.50	20.66	285.00	28.16
31	2	263.97	286.75	22.78	294.50	30.53
35	1	292.49	323.75	31.26	332.50	40.01
37	1	306.75	342.25	35.50	351.50	44.75

	Motorised sailing craft with electric motors:										
6	2	69.52	55.50	-14.02	57.00	-12.52					
7	5	73.33	64.75	-8.57	66.50	-6.82					
8	9	77.13	74.00	-3.13	76.00	-1.13					
9	7	80.93	83.25	2.32	85.50	4.57					
10	9	84.73	92.50	7.77	95.00	10.27					
11	20	88.53	101.75	13.22	104.50	15.97					
12	13	92.33	111.00	18.67	114.00	21.67					
13	4	96.13	120.25	24.12	123.50	27.37					
14	6	99.93	129.50	29.57	133.00	33.07					
15	1	104.92	138.75	33.83	142.50	37.58					
16	6	109.91	148.00	38.09	152.00	42.09					
17	4	114.91	157.25	42.35	161.50	46.60					
18	6	119.90	166.50	46.60	171.00	51.10					
19	5	124.89	175.75	50.86	180.50	55.61					
20	4	129.88	185.00	55.12	190.00	60.12					
23	2	144.85	212.75	67.90	218.50	73.65					
25	1	154.83	231.25	76.42	237.50	82.67					

Category 12 Private Sailing Craft £8.00 per metre²

Size in Meter ²	Number of craft	Toll Paid (£) in 2016/17	Toll (£) 16/17 under new structure	Difference in cash (£) terms	Proposed toll (£) for 2017/18	Difference in cash (£) terms
5	479	49.66	39.00	-10.66	40.00	-9.66
6	115	54.77	46.80	-7.97	48.00	-6.77
7	58	59.88	54.60	-5.28	56.00	-3.88
8	112	64.99	62.40	-2.59	64.00	-0.99
9	28	70.10	70.20	0.10	72.00	1.90
10	48	75.21	78.00	2.79	80.00	4.79
11	143	80.32	85.80	5.48	88.00	7.68
12	37	85.43	93.60	8.17	96.00	10.57
13	8	90.54	101.40	10.86	104.00	13.46
14	15	95.65	109.20	13.55	112.00	16.35
15	2	100.42	117.00	16.58	120.00	19.58
16	3	105.19	124.80	19.61	128.00	22.81
17	2	109.96	132.60	22.64	136.00	26.04
18	3	114.73	140.40	25.67	144.00	29.27
19	1	119.50	148.20	28.70	152.00	32.50
21	2	129.04	163.80	34.76	168.00	38.96
23	2	138.58	179.40	40.82	184.00	45.42
24	1	143.35	187.20	43.85	192.00	48.65
32	1	181.51	249.60	68.09	256.00	74.49
34	1	191.05	265.20	74.15	272.00	80.95

Category 13 Private Houseboats £5.15 per metre²

Category	13 Pilvale n	louseboats £5		1		
Size in Meter ²	Number of craft	Toll Paid (£) in 2016/17	Toll (£) 16/17 under new structure	Difference in cash (£) terms	Proposed toll (£) for 2017/18	Difference in cash (£) terms
10	1	75.21	50.00	-25.21	51.50	-23.71
11	3	80.32	55.00	-25.32	56.65	-23.67
12	2	85.43	60.00	-25.43	61.80	-23.63
14	1	95.65	70.00	-25.65	72.10	-23.55
15	2	100.42	75.00	-25.42	77.25	-23.17
17	3	109.96	85.00	-24.96	87.55	-22.41
18	1	114.73	90.00	-24.73	92.70	-22.03
19	3	119.50	95.00	-24.50	97.85	-21.65
20	1	124.27	100.00	-24.27	103.00	-21.27
21	2	129.04	105.00	-24.04	108.15	-20.89
22	1	133.81	110.00	-23.81	113.30	-20.51
24	2	143.35	120.00	-23.35	123.60	-19.75
25	1	148.12	125.00	-23.12	128.75	-19.37
26	2	152.89	130.00	-22.89	133.90	-18.99
28	3	162.43	140.00	-22.43	144.20	-18.23
29	1	167.20	145.00	-22.20	149.35	-17.85
30	1	171.97	150.00	-21.97	154.50	-17.47
31	1	176.74	155.00	-21.74	159.65	-17.09
32	1	181.51	160.00	-21.51	164.80	-16.71
33	2	186.28	165.00	-21.28	169.95	-16.33
35	2	195.82	175.00	-20.82	180.25	-15.57
36	4	200.59	180.00	-20.59	185.40	-15.19
37	1	205.36	185.00	-20.36	190.55	-14.81
38	2	210.13	190.00	-20.13	195.70	-14.43
40	1	219.67	200.00	-19.67	206.00	-13.67
41	2	224.44	205.00	-19.44	211.15	-13.29
42	1	229.21	210.00	-19.21	216.30	-12.91
44	1	238.75	220.00	-18.75	226.60	-12.15
45	1	243.52	225.00	-18.52	231.75	-11.77
46	1	248.29	230.00	-18.29	236.90	-11.39
48	1	257.83	240.00	-17.83	247.20	-10.63
49	2	262.60	245.00	-17.60	252.35	-10.25
50	1	267.37	250.00	-17.37	257.50	-9.87
61	1	319.84	305.00	-14.84	314.15	-5.69
62	1	324.61	310.00	-14.61	319.30	-5.31
75	1	386.62	375.00	-11.62	386.25	-0.37
110	1	553.57	550.00	-3.57	566.50	12.93

Category 14 Private Rowing boats, canoes etc. £32.85 per boat

Size in Meter ²	Number of craft	Toll Paid (£) in 2016/17	Toll (£) 16/17 under new structure	Difference in cash (£) terms	Proposed toll (£) for 2017/18	Difference in cash (£) terms
All	1576	31.88	31.88	0.00	32.85	0.97

Broads Authority Navigation Committee 27 October 2016 Agenda Item No 8

Broads Local Plan: Preferred Options – Policies with Navigation Implications
Report by Planning Policy Officer

Summary: This report introduces the selected policies with potential

navigation implications from the Broads Local Plan Preferred Options. This is the second consultation stage of the Local Plan production. It includes draft policies for the stakeholders and public to consider. Consultation will run from 5 December 2016 to 4pm on 3 February 2017 (a period of nine weeks).

Recommendation: Members' Views are requested.

1 Introduction

- 1.1 Local Planning Authorities are required to prepare a Local Plan which will define planning policies within its local planning authority area. These are given significant weight when deciding planning applications as all decisions are required to be made in accordance with the policies unless there are strong material reasons not to. Local plans must be positively prepared, justified, effective and consistent with national policy.
- 1.2 The National Planning Policy Framework (NPPF) (The Framework) states that every local planning authority in England should have a clear, up to date Local Plan, which conforms to the Framework, meets local development needs, and reflects local people's views of how they wish their community to develop. The process should fully involve everyone who has an interest in the document or area and they should have had the chance to comment.
- 1.3 The Broads Authority has three adopted Planning Policy documents: The Core Strategy, Development Management Document and the Sites Specifics Local Plan. Some of the policies have existed since 2007 and are not fully in line with Government policy now. As such, we are reviewing all our current policies and looking into new issues as we produce a new and up to date Local Plan.
- 1.4 For the avoidance of doubt, until the new Local Plan is adopted, the existing adopted and saved policies are in place and will be used in determining planning applications.

2 The Issues and Options Stage

2.1 Members may recall we completed the consultation on this version of the Local Plan between 15 February and 8 April 2016. We received many comments and these can be found on the Broads Authority website¹. These comments have helped inform the Preferred Options.

3 About the Preferred Options

- 3.1 This is the second stage of producing a Local Plan. The document includes draft policy wording, reasons for having such a policy as well as a vision and objectives.
- 3.2 The document is still work in progress however, there are some policies that have potential navigation implications and therefore the views of the Navigation Committee on these policies are sought.
- 3.3 This report identifies some particular policy areas that may be of interest to the Navigation Committee Members, Page numbers refer to the page of the Preferred Options document.
- 3.4 Please note that the Local Plan is still "work in progress" and the version you have received is the most up to date version at the time of submitting reports for Navigation Committee.

Challenges and Opportunities - Section 7, Page 20.

This section sets out a SWOT analysis (Strength, Weaknesses, Opportunities and Threats) of the Broads.

Vision and Objectives – Section 8, page 23.

The vision used in the Local Plan is the same as the Broads Plan vision. There are draft objectives for the Local Plan in this section as well.

Overarching Sustainable Development Policy – POSP2, page 27.

A policy that guides sustainable development in the Broads.

Policy PODM2: Boat wash down facilities, page 35

Wash down areas required as part of relevant development to tackle bioseciruty and anti-fouling paint entering the water.

Policy PODM7: Staithes, page 48

Seeks to protect staithes from development and

Policy PODM10: Peat, page 55

Policy seeks to reduce amount of peat lost/affected as part of proposals.

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¹ http://www.broads<u>-authority.gov.uk/planning/planning-policies/development/future-local-plan</u>

Section 20 – Navigation, page 109.

- Policy POSP10: Navigable Water Space
- Policy PODM28: Access to the Water
- Policy PODM29: Riverbank stabilisation
- Policy POSP11 Mooring Provision
- Policy PODM30: Moorings, mooring basins and marinas.

Policy PODM35: New Residential Moorings, page 130.

The policy is generally similar to the current adopted policy.

Policy PODM43: Safety by the Water, page 152

A new policy raising the importance of safety features for waterside development.

Policy PODM44: Planning Obligations and Developer Contributions, page 154 Refers to instances when planning obligations will be required and what kind of infrastructure they would be spent on.

Policy PODM47: Leisure plots and mooring plots, page 160

New leisure plots will not be permitted. The use of mooring plots will be restricted to the mooring of boats and uses incidental to that activity. Mooring plots will be kept generally free of buildings and above ground structures

<u>Section 28 – Site Specific Policies.</u>

There are numerous policies in this section. The majority will be relates to waterside sites or areas important for navigation. It is recommended that Navigation Committee members use the contents page of the Local Plan to navigate to settlements that are of particular interest.

With regards to the XNS policies, these are non-settlement based and cover a range of locations or a large area. Policies relevant to navigation are summarised below:

- Policy POXNS1: Trinity Broads, page 202. Seeks to protect the tranquillity of the area.
- Policy POXNS2: Upper Thurne, page 203. Seeks to protect the tranquillity of the area.
- Policy POXNS6: Waterside Pubs Network, page 209. Seeks to retain waterside pubs in public house use.

4 Next Steps

- 4.1 The Preferred Options version of the Local Plan will be taken to Planning Committee for Members' consideration on 11 November 2016.
- 4.2 Following Planning Committee, the Preferred Options will be taken to Full Authority on 18 November for Members' consideration.
- 4.3 If Full Authority agrees, the Preferred Options will then be published for public consultation for 9 weeks beginning on the 5 December.

4.4 When the consultation ends, the comments will be considered and reported back to Members in due course.

5 Conclusion

- 5.1 The Preferred Options of the Local Plan is the second stage of producing a new Local Plan for the Broads. It identifies draft policy wording.
- 5.2 This report seeks to explain the process as well as highlight particular draft policies that might be of particular interest to Navigation Committee members.
- 5.3 The views of Navigation Committee Members are sought.

Background papers: None

Author: Natalie Beal
Date of report: 5 October 2016

Appendices: <u>APPENDIX A: The Broads Local Plan – Preferred Options</u>

Navigation Committee 27 October 2016 Agenda Item No 9

Broadland Flood Alleviation Project:

Compartment 37 (Upton Dyke) - Piling Removal Works and the Installation of Erosion Protection - Application for Discharge of pre-commencement conditions linked to planning permission (BA2015/0364/FUL)

Report by Planning Officer

Summary:

This report provides Members with a copy of Broadland Environmental Services Ltd (BESLs) submission that seeks to discharge the precommencement requirements associated with the planning condition imposed on the consent granted for the removal of piling and installation of erosion protection in Upton Dyke (in Compartment 37).

1 Background

1.1 In November 2015, BESL submitted a planning application for pile removal on the south side of Upton Dyke (planning application ref BA2015/0364/FUL). This submission raised local concerns and the Navigation Committee considered the planning application at their meeting on 10 December 2015. At this meeting Members resolved to recommend that:

the Planning Committee refuses the planning application for the removal of piling and installation of erosion protection in Upton Dyke on the true right bank of the River Bure and request officers to discuss alternative options such as widening of the Dyke with the applicant.

1.2 Following this, further discussion took place with the applicant but no significant changes were made to the scheme. The application was subject of a Planning Committee Site Visit in January 2016 prior to determination by Planning Committee at their February meeting. At this meeting Members resolved to grant approval subject to:

conditions as outlined within the report including those covering the safeguards with an additional pre-commencement condition covering future management of the navigation area and the bodies responsible, specifically in relation to navigation uses and the environment.

- 1.3 Following this, BESL and Broads Officers engaged in further local discussion prior to the issue of the consent on 2 September 2016. This contained some 11 planning conditions of which 8 required the submission and agreement of details before works commence. These relate to:
 - Condition 2 Construction traffic management plan
 - Condition 3 Wheel washing facilities
 - Condition 4 Erosion monitoring and mitigation strategy
 - Condition 5 Sonar monitoring
 - Condition 6 Temporary channel marking detail

- Condition 8 Technique for removal of piles which fail to fully drive
- Condition 9 Timescale of works
- Condition 11 Management Plan to take action to remedy any failure of full compliance with approve scheme
- 1.4 Attached as Appendix 1 is the detail submitted by BESL. It is considered that conditions 4, 5, 6, 8, 9 and 11 relate most closely to Navigation Committee considerations.
- 1.5 In view of the concerns raised previously regarding this proposal, the purpose of this report is to outline the submitted details to Committee Members and invite any observations at this stage (it is however not the opportunity to revisit the initial objections raised by Navigation Committee which we fully weighed by the Planning Committee in determining this application).

2 Summary of Officers Comments

2.1 The Access and Recreation Officer considers that the details submitted in relation to conditions 4, 5 and 9, which detail the approach of BESL to erosion monitoring (including sonar monitoring), mitigation should erosion occur and timetable for works, follow established methodology, protocols and timescales and are appropriate in relation to the works proposed in Upton Dyke. In relation to condition 6, channel marking, the Access and Recreation Officer is content with red painted timber posts as temporary channel markers but consider that BESL should be required to remove these once Officers consider their function has ceased and that particular care is taken in marking the IDB culvert in the dyke, where a hard piled edge is required to remain.

With regard to conditions 8 and 11, the Access and Recreation Officer has requested Members views are provided regarding the technique for pile removal and the Management Plan provisions.

Finally, the Access and Recreation Officer has confirmed that discussion with BESL is ongoing to ensure that all piles are driven to a sufficient depth to ensure these works will present no navigation hazard.

3 Recommendation

3.1 Members' comments are welcomed on these proposals.

Background Papers: Planning File BA/2015/0364/FUL

Author: Andy Scales
Date of report: 13 October 2016

Broads Plan Objectives: None

Appendices: APPENDIX 1 - Discharge of condition details submitted by

BESL in letters dated 22 September and 27 September and

accompanying Management Plan

APPENDIX 1

Broadland Environmental Services Limited

Ms Cally Smith Broads Authority Yare House 62-64 Thorpe Road Norwich NR1 1RY 2 3 SEP 2016

BESL Harrier House 9 Whitlingham Lane Thorpe St Andrew Norwich NR7 0QA

Telephone: 01603 435054

Email: halcrow@bamnuttall.co.uk

Web www.bfap.org

Date: 22th September 2016

Direct Line: 01603 430352

Please reply to: Jamie Manners

Our reference: WNCFSH/66.1/JLM/090

COMPARTMENT 37, UPTON DYKE PILING REMOVAL PLANNING APPLICATION CONDITION DISCHARGE (BA/2015/0364/FUL)

Dear Cally,

With regard to the conditions attached to the above planning permission, please find enclosed the relevant information to discharge these. The BACS payment of £97 has been requested and should be with you soon.

Condition 2: A Construction Traffic Management Plan is enclosed.

<u>Condition 3:</u> Refer to the enclosed Construction Traffic Management Plan for details of wheel washing facilities.

Condition 4: The monitoring will follow the methodology outlined in the BESL Piling Removal: Erosion Monitoring Procedure document (18th January 2010), which has previously been agreed with the Broads Authority. This includes provision for regular photographic and hydrographic monitoring and producing a regular update for the Broads Authority. This will also be consistant with that outlined in the report submitted with the planning application. A regular series of wooden stakes painted red will be installed along the reprofiled bank to act as markers for the visual monitoring of erosion; these will be in pairs with one at the top of the river bank slope and the second 2m inland.

Erosion protection matting will be installed on the section between the staithe and the IDB culvert (Cross-section 1 on the submitted drawing WNCFSH/420/002) due to the ground conditions on this section considered to be more suceptible to erosion.

It is not proposed to install any erosion protection on the section from the IDB culvert to the river (cross-section 2 on the submitted drawing WNCFSH/420/002) because it is considered that no significant erosion is likely to take place here. Our experience of piling removal elsewhere, including on other reaches in the River Bure, has shown that reed growth is rapid and provides effective erosion protection.

Nevertheless it is acknowledged that monitoring is a necessary part of the procedure to ensure that there are no adverse impacts on either navigation or flood defence interests. If excessive erosion is identified and this is not stabilised by the reed growth, then the provision of soft erosion protection will be investigated.

The reed monitoring line will be in the same position as the existing line of piles along the edge of Upton Dyke. Before works commence, a GPS survey of the pile line will be undertaken and a record of this kept. A further similar survey of the current line of reed growth can be undertaken in the future

Registered address St James House, Knoll Road, Camberley, Surrey GU15 3XW
Registered number 305189 England and Wales

Broadland Environmental Services Limited is a Joint Venture Company of BAM Nuttall Limited and Halcrow Group Limited and this compared to the original survey of the pile line to ensure that there is no encroachment into the navigation channel as a result of the works.

<u>Condition 5:</u> A pre-works hydrographic survey will be undertaken before any pile works commence. A post-works survey will also be undertaken within 2 weeks of the completion of works. These monitoring surveys will be undertaken in accordance with the monitoring methodology referred to in Condition 3. Data will be supplied to the BA in the form of XYZ data; the method previously agreed and used.

<u>Condition 6:</u> As part of the erosion monitoring, wooden posts will be installed along the top edge of the sloping riverbank following piling removal works (see Condition 4). It is intended to use these posts to also act as navigation markers warning boats of the edge of the bank, particularly in times of high water when the earth river bank may be covered. These will be coloured red as Port Hand Markers.

The works have also been timed during the winter / early spring, so that the reed growth following piling removal will be rapid; this will form a visible mark to the edge of the channel very soon after piling removal has been completed. This is consistent with our observations from undertaking similar works elsewhere throughout the Broads. However, we will monitor vegetation establishment closely following the completion of works, and if this doesn't quickly achieve a suitable height above mean high water springs, then we will review the need for channel markers.

Condition 8: If some of the piles refuse to be driven to the correct level, then these will be removed using techniques developed on other BFAP comaprtments. That is, the ground will be reprofiled behind the in situ pile, then an excavator mounted grab will be used to grip the pile and pull it completely out. This will all take place using land based equipment, although a small boat / pontoon may be necessary to access the piles for preparatory works. Any piles removed will be taken from site by Wherry to an established yard at Acle Dyke for reuse or recycling. Please refer to the enclosed Construction Traffic Management Plan for details.

Condition 9: It is proposed to undertake the pile removal works starting from early November and completing any works on the dyke edge by late February. The progress and completion of this operation will be dependent upon the weather and ground conditions. If required, due to ground conditions, it will be necessary to undertake further reshaping works on the floodbank during June and July (outside of the main school holidays).

Condition 11: The riverside edge of the bank will be monitored according to the erosion monitoring procedure (see Condition 4) and the floodbank itself will be monitored as part of the annual condition surveys.

- If these surveys show any defect in the reprofiled river bank, then works will be undertaken by land based excavators to reshape the bank and remediate any underlying problems.
- A small amount of light boat damage is to be expected and usually causes no problems.
 However, if significant damage is found, then measures will be taken to regrade the slope using landbased plant.
- The significance and scale of any damage will be assessed and a remediation plan will be devised in proportion to this on a case by case basis. The Broads Authority will be informed of the remediation plan including timescales.

Please do not hesitate to contact us if you require any further information.

Jason Parker
BESL Project Manager

cc Paul Mitchelmore, Environment Agency Mike Falcon, BESL Land Agent

Enc: Construction Traffic Management Plan, WNG SH/420/001 & 002

Construction Traffic Management Plan for Compartment 37 Upton Dyke Piling Removal

Traffic movements - Workforce

During the site induction all operatives are to be informed of the designated site access routes and site compound locations. All restrictions on the routes, such as vehicle size/weight/type, will also be made clear to all staff. They will be briefed on the need to be alert to the presence of pedestrians or cyclists that may be using the roads, particularly in and around the village of Upton.

It is expected that the workforce travelling to site will generate approximately 3 vehicle movements in the morning and approximately 3 in the evening. These will consist of 4x4s, light vans or cars. Vehicles will park in the staithe car park.

Traffic movements - Deliveries

A map containing the full delivery address, access routes and compound locations will be sent to suppliers as will a copy of the traffic management plan. Suppliers will be informed of permitted routes for their deliveries and working hours, which are 0700-1800 Monday-Friday and 0700-1300 on Saturday and told not to deliver outside of these times.

For large vehicles or low loaders, suppliers are requested to inform a member of staff by telephone at least one hour before they arrive on site so arrangements can be made to meet them at a suitable location en-route and escort them into the location of the offload.

Plant, such as excavators will be delivered by low loader at the start of the works and collected at the end of the works. These deliveries will be made from the A47 or A1064 via South Walsham Road (B1140), Church Road, Chapel Road, The Green and Boat Dyke Road to Upton Staithe. There will be 2-3 deliveries at the start and 2-3 at the end.

Please see enclosed drawing WNCFSH/420/001 showing access routes.

Any sheet piling that is removed (rather than driven down) as part of the works will be transported from site by river to Acle Dyke using barges. The materials will be stored in an established yard there for recycling or reuse within the BFAP.

Wheel Washing

Delivery lorries will be kept on hard standing material and the site will be managed in order to minimise the potential risk of mud and loose clay being in the area the lorries are operating. All access tracks and offloading areas will be maintained to be mud free. Therefore any wheel washing required is expected to be minimal. However, there will be a system of inspection before leaving site to ensure that any 4x4s or lorries do not have mud on their wheels or bodywork that could transfer to the highway. A portable pressure washer will be kept on site and if wheels are found to have picked up mud, they will be pressure washed before leaving the site and onto the highway. In the unlikely event that site traffic does cause mud to be deposited on the highway, a road sweeper will be deployed to clear up the affected area.

Signage

The photos below shows typical road signs that will be positioned in the road verge 100m in both directions from the access points, with a separate sign at the actual access point. Similar signage has been used to good effect in other compartments.





These signs will be used to clearly mark out the access routes to the working corridor and to prevent vehicles using roads not identified in the construction traffic management plan. Signs can be annotated to apply to specific vehicles or deliveries; e.g. "Low Loaders".





Condition Monitoring

A video survey of all tracks and minor roads on the access routes will be undertaken to record the pre-works condition of the roads and verges. These will be repeated at the completion of the scheme and can be used to assess if any damage to the highway has resulted from the works traffic. Private access tracks from the highway to all works areas and the site compound shall be maintained throughout the construction period. On completion of works they will be restored to at least as good a condition as was present prior to works.

In addition, a weekly drive through survey of all the routes will be undertaken by BAM Nuttall to inspect the roads, verges and the signage. Any necessary remediation work on the signage will be actioned immediately and any damage or issues with the roads will be reported to the highways authority immediately.

Emergency Contact

BAM Nuttall Foreman for Compartment 37, Neil Bower, at Norwich Office - Telephone: 01603 435054 or Hardley Compound – Telephone: 01508 521924.

BESL 8th September 2014

Broadland Environmental Services Limited

Ms Cally Smith Broads Authority Yare House 62-64 Thorpe Road Norwich NR1 1RY

Our reference: WNCFSH/66.1/JLM/091

BESL Harrier House 9 Whitlingham Lane Thorpe St Andrew Norwich NR7 0QA

Telephone: 01603 435054

Email: halcrow@bamnuttall.co.uk

Web www.bfap.org

Date: 27th September 2016

Direct Line: 01603 430352

Please reply to: Jamie Manners

COMPARTMENT 37, UPTON DYKE PILING REMOVAL PLANNING APPLICATION CONDITION DISCHARGE (BA/2015/0364/FUL) – ADDITIONAL INFORMATION

Dear Cally,

Further to our letter dated 22nd September, please find some additional information relating to the following conditions.

Condition 4: A copy of the survey of the original line of the piles will be supplied to the BA to act as a baseline for the position of the reed monitoring line.

In addition to this, wooden posts will be placed to act as a transit, visually marking the position of the reed monitoring line. One post will be placed at the downstream end of the staithe moorings (which will also mark the end of the moorings) and two further posts will be placed on the section of retained piling by the IDB structure. Two of these posts can be visually lined up to quickly assess if reed is encroaching beyond the monitoring line.

<u>Condition 5:</u> A pre-works sonar monitoring survey will be undertaken before any pile works commence. A post-works survey will also be undertaken within 2 weeks of the completion of works. These monitoring surveys will then be undertaken in accordance with the monitoring methodology referred to in Condition 4. Data will be supplied to the BA in the form of XYZ data on request; the method previously agreed and used.

Condition 11: See the enclosed management plan.

Please do not hesitate to contact us if you require any further information.

Yours sincerely,

Jason Parker BESL Project Manager

cc Paul Mitchelmore, Environment Agency Mike Falcon, BESL Land Agent

Enc Management Plan

Registered address St James House, Knoll Road, Camberley, Surrey GU15 3XW

Registered number 305189 England and Wales

Marsh Harrier - Circus aeruginosus

Broadland Environmental Services Limited is a Joint Venture Company of BAM Nuttall Limited and Halcrow Group Limited

Upton Dyke Piling Removal: Management Plan

This management plan has been prepared to address the concerns referred to in Condition 11 of the planning permission and ensure that there are no adverse effects on the riverbank or boat dyke during or following the piling removal works. The following points refer to the respective sections of that planning condition.

- 1. It is proposed to undertake the pile removal works starting from early November and completing any works on the dyke edge by late February. The progress and completion of this operation will be dependent upon the weather and ground conditions. If required, due to wet ground conditions, it will be necessary to undertake further reshaping works on the floodbank during June and July (outside of the main school holidays) to ensure that a satisfactory finish to the floodbank and footpath surface can be achieved.
- 2. It is not expected that any riverbank movement or slumping will occur following piling removal; indeed, erosion protection matting will be installed in the area where ground conditions are likely to be most vulnerable. However, erosion monitoring surveys will be undertaken and if these show any defect in the reprofiled river bank (particularly if these encroach into the main channel beyond the reed monitoring line), then works will be undertaken by land based excavators to reshape the bank and remediate any underlying problems. This will ensure that there are no lasting impacts on the navigation channel or the flood defence bank.
- 3. A small amount of light boat damage is to be expected and usually causes no problems. However, if significant damage is found, particularly if there is any encroachment into the navigation channel beyond the reed monitoring line, then measures will be taken to regrade the slope using land based plant. Monitoring would then continue to ensure no long term impacts.
- 4. The coir matting is intended to provide temporary protection from erosion until a fringe of reed establishes and the coir matting degrades over time. If the matting is damaged before reed has grown, then repair or replacement will be undertaken. Once the reed has grown, damage will only be repaired if it is necessary for erosion protection or if it is causing a hazard to navigation. The measures in Section 3 above will be implemented, as well as the timescales in Section 5 below.
- 5. The significance and scale of any damage will be assessed and a remediation plan will be devised in proportion to this on a case by case basis. If a report of damage is received, BESL will inspect the site within 1 week and propose a course of action to remediate the damage within a further week (2 weeks total). The time taken to effect a repair will depend on the scale of the problem. It is expected that the following timescales will be likely: 1 month for minor damage and 3 months for major damage.
- 6. BESL will retain responsibility for the maintenance of the river bank until 2021, when responsibility will be transferred back to the Environment Agency. This is in line with the other responsibilities of the BFAP.

BESL 27-9-16

Navigation Income and Expenditure: 1 April to 31 August 2016 Actual and 2016/17 Forecast Outturn Report by Head of Finance

Summary:

This report provides the Committee with details of the actual navigation income and expenditure for the five month period to 31 August 2016, and provides a forecast of the projected expenditure at the end of the financial year (31 March 2017).

1 Introduction

1.1 This report provides a summary of the Income and Expenditure for the Navigation Budget up until 31 August. It includes any amendments to the Latest Available Budget (LAB), Forecast Outturn (predicted year end position) and the movements on the earmarked reserves.

2 Overview of Actual Income and Expenditure

<u>Table 1 – Actual Navigation I&E by Directorate to 31 August 2016</u>

	Profiled Latest Available	Actual Income and	Actual Variance
	Budget	Expenditure	
Income	(2,997,014)	(2,972,097)	- 24,916
Operations	977,719	914,168	+ 63,550
Planning and			
Resources	355,659	349,973	+ 5,686
Chief Executive	63,682	56,156	+ 7,526
Projects, Corporate			
Items and			
Contributions from			
Earmarked			
Reserves	10,712	27,903	- 17,192
Net (Surplus) /			
Deficit	(1,589,242)	(1,623,896)	+ 34,654

- 2.1 Core navigation income is behind the profiled budget at the end of month five. The overall position as at 31 August 2016 is a favourable variance of £34,654 or 2.18% difference from the profiled LAB. This is principally due to:
 - An overall adverse variance of £25,180 within toll income:
 - o Hire Craft Tolls £33,416 below the profiled budget
 - o Private Craft Tolls £9,445 above the profiled budget

- An underspend within Operations budgets relating to:
 - Practical Maintenance is under profile by £28,059 due to timing differences on various projects
 - Ranger Services is under profile by £16,717 due to a staff vacancy at the beginning of the year and timing differences on the purchase of a new vehicle
- A small underspend within Planning and Resources budgets relating to a number of budgets
- A small underspend within Chief Executive following the vacancy of the Solicitor and Monitoring Officer at the start of the financial year
- An adverse variance within Reserves relating to the delayed invoicing on the old workshop repairs and the ranger replacement vehicle
- 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 2016/17. 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 set out in Appendix 2.

Table 2 – Adjustments to Navigation LAB

	Ref	£
Original navigation budget 2016/17 (surplus)	Item 12	(16,160)
Original havigation budget 2010/17 (Surplus)	18/03/16	(10,100)
Approved carry-forwards from 2015/16	Item 13	181
Approved carry-rorwards from 2015/10	13/05/16	101
Virement from OMA/SPS to ASS/DVM to cover	CEO	(2.120)
admin restructure	approved	(2,129)
Correct allocation of Rivers Engineer		20,502
LAB at 31 August 2016		2,394

3.2 The LAB therefore provides for a navigation deficit of £2,394 in 2016/17 as at 31 August 2016.

4 Overview of Forecast Outturn 2016/17

- 4.1 Budget holders have been asked to comment on the expected expenditure at the end of the financial year in respect of all budget lines for which they are responsible. It must be emphasised that these forecast outturn figures should be seen as estimates and it is anticipated that they will continue to be refined and clarified through the financial year.
- 4.2 As at the end of August 2016, the forecast outturn indicates:
 - The total forecast income is £3,097,739, or £22,100 less than the LAB

- Total expenditure is forecast to be £3,106,686
- The resulting deficit for the year is forecast to be £8,947
- 4.3 The forecast outturn expenditure reflects the following changes from the LAB as shown in Table 3. The forecast deficit represents an adverse variance of £6,553 against the LAB.

Table 3 – Adjustments to Forecast Outturn

	£
Forecast outturn deficit per LAB	2,394
Adjustments previously reported 08/09/16	28,360
Increase to Hire Craft Toll income	(9,373)
Increase to Private Craft Toll income	(1,199)
Decrease to Interest income to reflect actual rates	2,500
Decrease to Vehicle expenditure to reflect lease costs &	
fuel consumption	(6,300)
Increase to Vessel income for work licences	(350)
Increase to ECP income to reflect actual	(1,500)
Increase to Standby costs	1,608
Decrease to IT costs due to lower lease costs	(2,706)
Decrease to Governance costs due to electronic paper	
saving	(759)
Decrease to Head Office costs to reflect lease incentive	(3,728)
	·
Forecast outturn deficit as at 31 August 2016	8,947

4.4 The main reason for the difference between the forecast outturn and the LAB is the reduction in toll income which has been offset by savings in other budgets.

5 Reserves

<u>Table 4 – Navigation Earmarked Re</u>serves

	Balance at 1 April 2016	In-year movements	Current reserve balance
	£	£	£
Property	(283,309)	(30,518)	(313,827)
Plant, Vessels			
and Equipment	(283,108)	(74,498)	(357,605)
Premises	(98,908)	(20,063)	(118,971)
Total	(665,324)	(125,079)	(790,403)

5.1 Items funded from the Plant, Vessel and Equipment include; the final instalments on the Launch fit out and the third Wherry. Income from the sale of the Chet launch has also been credited to the reserve.

6 Summary

6.1 The current forecast outturn position for the year suggests a deficit within the navigation budget which would result in a navigation reserve balance of approximately £324,142 at the end of 2016/17 (before any year-end adjustments). This would mean the Navigation Reserve would be slightly above the recommended 10% at 10.4%. Year-end transfers of interest to the earmarked reserves will mean that it will fall to approximately 10.3%. This will be highly dependent on the actual level of interest received.

Background Papers: Nil

Author: Emma Krelle
Date of Report: 10 October 2016

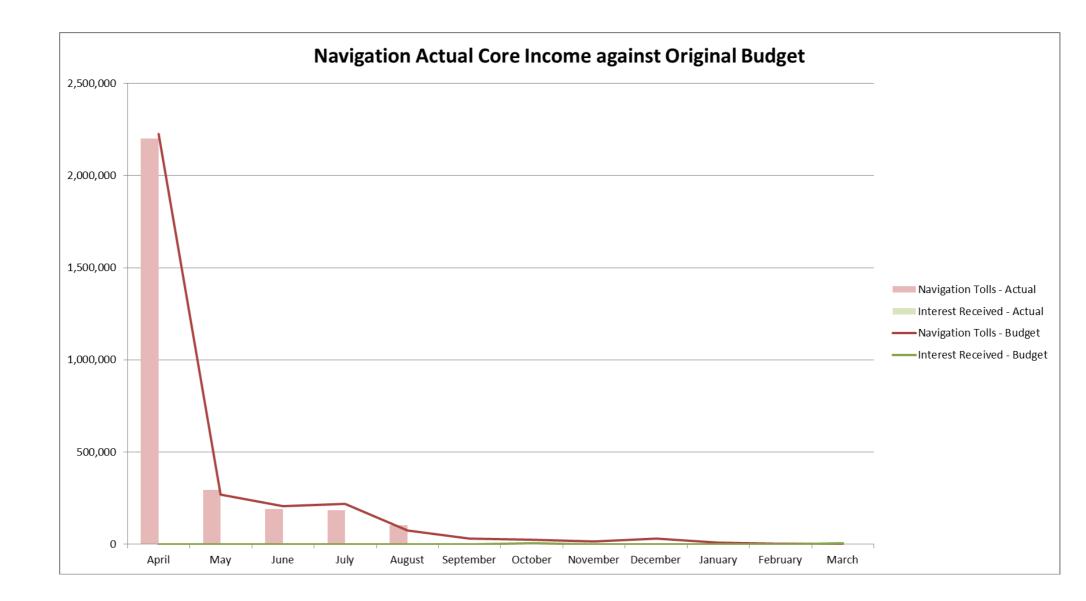
Broads Plan Objectives: None

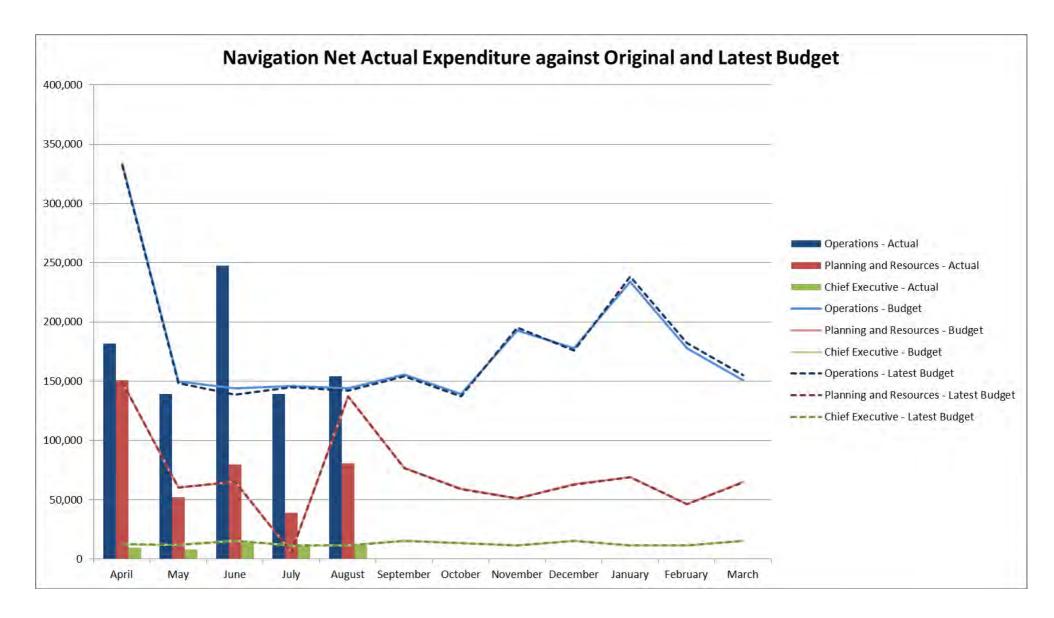
Appendices: APPENDIX 1 – Navigation Actual Income and Expenditure

Charts to 31 August 2016

APPENDIX 2 - Financial Monitor: Navigation Income and

Expenditure 2016/17





To 31 August 2016

Budget Holder (All)

	Values				
Row Labels	Original Budget (Navigation)	Budget Adjustments (Navigation)	Latest Available Budget (Navigation)	Forecast Outturn (Navigation)	Forecast Outturn Variance (Navigation)
Income	(3,119,839)		(3,119,839)	(3,097,739)	- 22,100
National Park Grant	0		0	0	+ 0
Income	0		0	0	+ 0
Hire Craft Tolls	(1,079,000)		(1,079,000)	(1,052,860)	- 26,140
Income	(1,079,000)		(1,079,000)	(1,052,860)	- 26,140
Private Craft Tolls	(1,972,000)		(1,972,000)	(1,978,540)	+ 6,540
Income	(1,972,000)		(1,972,000)	(1,978,540)	+ 6,540
Short Visit Tolls	(40,089)		(40,089)	(40,089)	+ 0
Income	(40,089)		(40,089)	(40,089)	+ 0
Other Toll Income	(18,750)		(18,750)	(18,750)	+ 0
Income	(18,750)		(18,750)	(18,750)	+ 0
Interest	(10,000)		(10,000)	(7,500)	- 2,500
Income	(10,000)		(10,000)	(7,500)	- 2,500
Operations	2,274,415	(1,756)	2,272,659	2,267,182	+ 5,478
Construction and Maintenance Salaries	713,717		713,717	713,717	+ 0
Salaries	713,717		713,717	713,717	+ 0
Expenditure			0		+ 0
Equipment, Vehicles & Vessels	293,883		293,883	287,233	+ 6,650
Income	0		0	(350)	+ 350
Expenditure	293,883		293,883	287,583	+ 6,300
Water Management	112,500		112,500	112,500	+ 0
Income			0		+ 0
Expenditure	112,500		112,500	112,500	+ 0
Land Management	0		0	0	+ 0
Income	0		0	0	+ 0

Row Labels	Original Budget (Navigation)	Budget Adjustments (Navigation)	Latest Available Budget (Navigation)	Forecast Outturn (Navigation)	Forecast Outturn Variance (Navigation)
Expenditure	0		0	0	+ 0
Practical Maintenance	344,200		344,200	342,700	+ 1,500
Income	(9,000)		(9,000)	(10,500)	+ 1,500
Expenditure	353,200		353,200	353,200	+ 0
Ranger Services	465,371		465,371	465,371	+ 0
Income	(33,000)		(33,000)	(33,000)	+ 0
Salaries	358,116		358,116	358,116	+ 0
Expenditure	140,255		140,255	140,255	+ 0
Pension Payments			0		+ 0
Safety	75,043		75,043	76,087	- 1,044
Income	(9,000)		(9,000)	(1,000)	- 8,000
Salaries	41,958		41,958	43,566	- 1,608
Expenditure	42,085		42,085	33,521	+ 8,565
Asset Management	92,114	1,296	93,410	95,039	- 1,629
Income	(450)		(450)	(450)	+ 0
Salaries	18,689	1,296	19,985	21,614	- 1,629
Expenditure	73,875		73,875	73,875	+ 0
Premises	106,719		106,719	106,719	+ 0
Income	(1,600)		(1,600)	(1,600)	+ 0
Expenditure	108,319		108,319	108,319	+ 0
Operations Management and Administration	70,868	(3,052)	67,816	67,816	+ 0
Income			0		+ 0
Salaries	63,868	(3,052)	60,816	60,816	+ 0
Expenditure	7,000		7,000	7,000	+ 0
Planning and Resources	742,559	(373)	742,186	736,627	+ 5,559
Development Management	0	0	0	0	+ 0
Income	0		0	0	+ 0
Salaries	0	0	0	0	+ 0
Expenditure	0		0	0	+ 0

Row Labels	Original Budget (Navigation)	Budget Adjustments (Navigation)	Latest Available Budget (Navigation)	Forecast Outturn (Navigation)	Forecast Outturn Variance (Navigation)
Pension Payments			0		+ 0
Strategy and Projects Salaries	21,824	(373)	21,452	21,452	+ 0
Income	0		0	0	+ 0
Salaries	18,224	(373)	17,852	17,852	+ 0
Expenditure	3,600		3,600	3,600	+ 0
Biodiversity Strategy	0	0	0	0	+ 0
Income			0		+ 0
Expenditure	0	0	0	0	+ 0
Strategy and Projects	4,181	0	4,181	4,181	+ 0
Income			0		+ 0
Salaries	4,181		4,181	4,181	+ 0
Expenditure	0	0	0	0	+ 0
Waterways and Recreation Strategy	43,980		43,980	43,980	+ 0
Salaries	34,980		34,980	34,980	+ 0
Expenditure	9,000		9,000	9,000	+ 0
Project Funding	0		0	0	+ 0
Income	0		0	0	+ 0
Expenditure	0		0	0	+ 0
Pension Payments			0		+ 0
Partnerships / HLF	0		0	0	+ 0
Income	0		0	0	+ 0
Salaries	0		0	0	+ 0
Expenditure	0		0	0	+ 0
Volunteers	26,648		26,648	26,648	+ 0
Income	(400)		(400)	(400)	+ 0
Salaries	19,048		19,048	19,048	+ 0
Expenditure	8,000		8,000	8,000	+ 0
Finance and Insurance	162,875		162,875	163,750	- 875
Salaries	68,875		68,875	69,750	- 875

Row Labels	Original Budget (Navigation)	Budget Adjustments (Navigation)	Latest Available Budget (Navigation)	Forecast Outturn (Navigation)	Forecast Outturn Variance (Navigation)
Expenditure	94,000		94,000	94,000	+ 0
Communications	63,605		63,605	63,605	+ 0
Income			0		+ 0
Salaries	51,605		51,605	51,605	+ 0
Expenditure	12,000		12,000	12,000	+ 0
Visitor Centres and Yacht Stations	65,835		65,835	65,835	+ 0
Income	(60,000)		(60,000)	(60,000)	+ 0
Salaries	101,835		101,835	101,835	+ 0
Expenditure	24,000		24,000	24,000	+ 0
Collection of Tolls	122,230		122,230	122,230	+ 0
Salaries	109,530		109,530	109,530	+ 0
Expenditure	12,700		12,700	12,700	+ 0
ICT	90,892		90,892	88,186	+ 2,706
Salaries	47,431		47,431	47,431	+ 0
Expenditure	43,461		43,461	40,755	+ 2,706
Premises - Head Office	73,819		73,819	70,091	+ 3,728
Expenditure	73,819		73,819	70,091	+ 3,728
Planning and Resources Management and Administration	66,669		66,669	66,669	+ 0
Income			0		+ 0
Salaries	41,070		41,070	41,070	+ 0
Expenditure	25,599		25,599	25,599	+ 0
Chief Executive	158,455	181	158,636	154,126	+ 4,510
Human Resources	48,269	181	48,450	49,012	- 562
Salaries	23,874		23,874	24,436	- 562
Expenditure	24,395	181	24,576	24,576	+ 0
Legal	28,490		28,490	24,177	+ 4,313
Income			0		+ 0
Salaries	16,490		16,490	12,177	+ 4,313
Expenditure	12,000		12,000	12,000	+ 0

Row Labels	Original Budget (Navigation)	Budget Adjustments (Navigation)	Latest Available Budget (Navigation)	Forecast Outturn (Navigation)	Forecast Outturn Variance (Navigation)
Governance	40,686		40,686	39,927	+ 759
Salaries	22,800		22,800	22,800	+ 0
Expenditure	17,886		17,886	17,127	+ 759
Chief Executive	41,010		41,010	41,010	+ 0
Salaries	41,010		41,010	41,010	+ 0
Expenditure			0		+ 0
Projects and Corporate Items	54,800		54,800	54,800	+ 0
Corporate Items	54,800		54,800	54,800	+ 0
Pension Payments	54,800		54,800	54,800	+ 0
Contributions from Earmarked Reserves	(106,048)		(106,048)	(106,048)	+ 0
Earmarked Reserves	(106,048)		(106,048)	(106,048)	+ 0
Expenditure	(106,048)		(106,048)	(106,048)	+ 0
Grand Total	4,342	(1,948)	2,394	8,947	- 6,553

Construction, Maintenance and Environment Work Programme Progress Update

Report by Head of Construction, Maintenance & Environment

Summary: This report sets out the progress made in the delivery of the 2016/17

Construction, Maintenance and Environment Section work programme.

Also included is an update on the Hickling Enhancement Project (1.4) for member's information.

1 Construction Programme updates 2016/17

- 1.1 The progress of the Construction and Maintenance work programme is described in this report. As previously reported verbally to members, a further detailed breakdown shows that up to the end of September 2016, 23,290m³ of sediment has been removed from the Rivers and Broads, and the details of quantities and costs achieved so far are set out in Appendix 1. This represents 48% of the programmed target of at least 50,000m³.
- 1.2 Dredging continues at Haddiscoe Cut, with offloading equipment moved from the true left bank, upstream of Reedham Ferry to the true right bank near Reedham Village. Dredged material is being deposited onto land owned by the Raveningham Estate.
- 1.3 The second dredging crew is operating on the River Yare at Whitlingham. This material is being transported downstream and placed in Postwick Tip.
- 1.4 The Hickling Enhancement project has started with Nico-span geo-textile material being spanned out and pinned using timber posts, to create the bay areas. These bays will be filled with dredged channel sediments once the required environmental parameters are met. The first area at 'Studio Bay' has been completed and the zone at 'Churchill Bay' is underway.
- 1.5 3,600m³ of dredging work scheduled to be completed this winter in Lime Kiln Dyke has had to be deferred as replacement equipment for Grab 7 and old Linkflotes will not be available before April 2017.
- 1.6 The Fen Harvester has just completed works, started earlier in the year, at Geldeston Marshes. From Geldeston it moved to Rockland to carry out wildlife mitigation, prior to the dredging work, programmed for Rockland Dyke starting in November.

2 Maintenance Programme Update 2015/16

- 2.1 The Maintenance Team have been fully deployed over the months since the last report, below are a few highlights of the projects and tasks undertaken:
- 2.2 Conservation tasks have started now the bird nesting season has finished with scrub clearance at Mill Marsh, Reedham Marsh and Hall Fen. Invasive species removal (Parrots Feather) has also taken place at Snipes Marsh.
- 2.3 Gauge Boards have been repaired at Thorpe and Mutford lock, speed signs have been replaced on the River Waveney and safety ladder repairs at Hardley Cross have all been carried out to ensure the safety elements on the network are well maintained.
- 2.4 The Weed Cutting programme is nearing completion as a drop in water temperature and reducing sunlight has seen a decline in the aquatic plant growth. Upper Bure received its second cut and a small scheme at Sluttons Dyke will be the last cut for this year.

3 Environment Team Programme Update 2015/16

- 3.1 As part of the Hickling Enhancement reed and mace from adjoining dykes will be removed and transplanted into sediments placed in Churchill Bay. These dykes are also home to the rare Crested Buckler Fern (*Dryopteris cristata*) so Environment Officers have surveyed, segregated and protected areas where this plant is growing, to ensure the species is not disturbed when we work in these areas.
- 3.2 The Tree Management Plan at How Hill has been reviewed and trees have been identified for felling and other arboreal works identified to maintain the woodland in a healthy and safe state.
- 3.3 In order to progress sediment removal, disposal sites within the broads need to have ecological surveys conducted to ensure species are protected and habits maintained. Therefore sites along the Bure and Waveney have been surveyed prior to works commencing and management plans and mitigation measures determined to achieve these requirements.
- 3.4 At this time of year the Ranger Service are also starting to carry out additional land management tasks within their designated areas. The Environment Officers work closely with the Rangers to advise and guide of best practice and other mitigation tasks to ensure works comply with our best practice and are in keeping with current legislation. Environment Officers have been attending local Ranger Team meetings to discuss the various Ranger Area Plans.
- 3.5 As the Waste Tip (permitted by the Environment Agency) at Postwick is actively receiving dredged material from the River Yare, we have to

implement a higher degree of monitoring, as per the Environment Permit. This means Environment Officers have to collect weekly ground water samples from various piezometers spread around the site. These samples are tested and analyzed to ensure leachate is not re-entering the river system.

4 Fitter Team

- 4.1 The existing, agricultural workshop building at Griffin Lane has been refurbished. The single skinned walls have been insulated (improved thermal properties reduced acoustic reverberations), electrical wiring & systems have andbeen upgraded to meet current standards and lighting has been improved. This upgrade is part of the regeneration of the Dockyard facility. The next phase will be to retrofit the old 'bomb trailer' to allow larger vessels and taller equipment to enter the workshop when being repaired or re-fitted.
- 4.2 The reoccurring fault with the Spirit of Breydon has been identified with one of the wiring looms having a loose pin connection This situation is being closely monitored.
- 4.3 Other works include, ignition system repairs to the Charles Collier, re-wiring of Grab 10, repairs to the hydraulic systems on the Berky Weed Cutter 'Megan' Diagnostic's to investigate electrical issues with electric drive on motor launch Martin Broom, and replacement wing mirrors being fitted to the dockyard telescopic handler.

Background papers: Nil

Author: Rob Rogers
Date of report: 14 October 2016

Broads Plan ref: NA1.1

Appendices: APPENDIX 1 – Dredging Programme 2016/17

Dredging Progress 2016/17 (April to end September 2016)

APPENDIX 1

Project Title	Project Element	Active BA dredging weeks Completed (to end	Volum Remov m³	-	Annual project Cost ^a	Actual project cost (Apr-Sep)
		Sep / Planned)	Planned	Actual	Planned	Actual
Mid Bure	Horning Church to Ranworth Dyke (Apr-mid Jun)	11/10	5,000	5,820	57,480	61,900
Completed setbac	ck areas at Horning Hall					
Bure Mouth	Contractor (April)	-	500	500	3,700	3,700
Contractor compl	eted plough/agitation dredging to clear bar					
Lower Waveney	Burgh Castle (Apr-May)	6/8	4,000	4,140	43,430	38.220
Upstream and inc	luding Burgh Castle 24 hr moorings. Shoal at Burgh Flat	s not completed this	year			
Lower Yare	Seven Mile House to Berney Arms (June)	4/6	4,000	4,290	33,060	23,970
Shoals planned fo	r dredging were completed					
Haddiscoe Cut	Haddiscoe and Reedham ends (End Jul–mid Nov)	9/16	14,000	3,400	94,790	67,050
Started at the St C	Dlaves end. Setback area near Reedham Ferrypartially fil	lled. Moved to setbac	k on Raveni	ingham sid	le of river	
Yare - Whitlingham	Bends downstream of Whitlingham Broad (Aug-Oct)	6/12	5,000	5,140	61,100	13,790
Good progress in	terms of dredging, but capacity at Postwick Tip has filled	rapidly				
Hickling	Marked channel north of Catfield channel (Nov-Jan)	-/15	6,000		129,250	22,030
Planning permission	on gained. Installation of wooden post & Nicospan retain	ing walls has started				
Rockland Boat Dyke	Rockland and bar at Langley Dyke (Dec-Jan)	-/8	2,900		29,630	0
Landowner agree	ments gained in principle for sediment off-load. Final deta	ails to be agreed.				
Limekiln Dyke	Gayes Staithe to Neatishead Staithe (Feb-Mar)	-/8	3,600		18,960	0
CANCELLED FOR	2016/17 – Replacement equipment for Grab 7 and old L	Linkflotes will not be a	available bef	ore April 2	017	ı
Lower Bure	Bure Loop (Feb-Mar)	-/6	5,000		34,940	430
Start date in 2016/	17 depends on final timing and progress of work at Hickl	ing. Main works dura	tion will be in	2017/18		•
TOTAL		36/95	50,000	23,290	506,340	231,090

^a –project costs includes 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

27 October 2016 Agenda Item No 12

BROADS AUTHORITY

BOATING SAFETY MANAGEMENT GROUP

Notes of the meeting held on 19th September 2016 at the Dockyard

Present

Michael Whitaker (in the Broads Authority Lead Member for Safety Management

chair)

Nicky Talbot Broads Authority Navigation Committee
Tony Howes Broads Hire Boat Federation (BHBF)
Colin Dye Broads Hire Boat Federation (BHBF)
Stuart Carruthers Royal Yachting Association (RYA)

John Tibbenham Norfolk & Suffolk Boating Association (NSBA)
Colwyn Thomas Water Safety Advisor for Whitlingham Boathouses.

Trudi Wakelin BA Director of Operations

Steve Birtles BA Head of Safety Management Lucy Burchnall BA Deputy Head of Ranger Services

Adrian Clarke BA Senior Waterways and Recreation Officer

Chris Bailey BA Administrative Officer Operations

1. Apologies

Apologies were received from Richard Musgrove (East Port Company), Les Mogford (Norfolk & Suffolk Boating Association), Anthony Trafford (British Marine Federation) and Tom Hunter (BA Rivers Engineer).

2. Minutes agreed

The notes of the meeting held 07 March 2016 were agreed as a correct record with the following amendment within Any Other Business:-

CT raised the issue that Norwich Rowing Club (NRC) had submitted a formal letter of complaint to the BA regarding the failure to secure a prosecution of the helm of Lazybones II following a serious incident involving an NRC 4x- last summer. TW offered an unreserved apology to NRC on behalf of the BA. CT requested that the BA investigate any other remaining sanctions that could be applied against the owner.

3. Matter Arising

There were no matters arising.

4. **Action Points**

Designated loading provision – The Staithes register had now been completed by Tom Williamson from the University of East Anglia and would be presented at the next meeting of the BSMG. The register would also be made available on the Authority's website and members would be advised if it was live before the next meeting.

AC

Interim report on Annual Marine Incidents 2015/16 – More information had been requested surrounding the death of a lady falling in the river following a heart attack. The Coroner had confirmed that the lady had died due to lack of oxygen to the brain through heart disease and a drowning element but that it was not possible to ascertain whether she had sustained a heart attack which had caused her to fall in the water or whether the falling in had caused the heart attack.

Rowing incidents – It was confirmed that the Authority would be advised if there were any third party involvements.

Boat Testing Areas Log Books – Log books had been examined by Authority staff when they had visited boatyards to provide them with information surrounding Carbon Monoxide poisoning and were found to have been filled in correctly. It was confirmed that the log books would be called in during the Christmas period to enable analysis to be undertaken and a report would be presented at the March meeting of the group.

SB

Sunken Vessels – Following the vessel which had sunk near Coldham Hall it was reported that the Authority had reviewed its sunken vessel reporting. Discussion turned to the two vessels which were sunk near Riverside and it was confirmed that the Authority was currently working on getting plant and equipment into the area to raise the vessels. It was noted that 7 or 8 vessels had already been raised in Norwich to date.

Summary of Vessels given Navigation Warning for Excess Speed and Wash – The data previously provided to the group had been updated to identify day hire and weekly hire vessels and Members felt it would be beneficial for this information to be a standing item on the BSMG agenda. LB

A member expressed concern over the speed of both hired and private vessels travelling through Brundall and suggested that the speed restriction should be reduced to 4mph. It was noted that changing the byelaws would be a significant and expensive piece of work and that the issue was not just about speed but the wash generated. It was confirmed that existing signage would be examined and there was also the opportunity for radar speed checks on specific frontages to the river. It was agreed that Andy Cullum be asked to liaise with CD outside of the meeting.

LB

5. Rowing Coaching Code of Conduct

The final copy of the code of conduct had been agreed with the rowing clubs and there would be a formal handover which would be finalised with CT. LB tabled a copy of the map identifying specific low wash zones within the rowing coaching area. It was suggested that the Frostbite club should be identified on the map when revised. LB confirmed that she would email a copy to all members. Larger registration numbers for display on coaching vessels were still required. It was confirmed that the clubs were all aware of the rules and regulations and there had not been any reported incidents. It was noted that whilst there had been an increase in the number of coaching launches they predominantly had low wash hulls. CT reported that Anita Davies was now the representative for the Norwich Rowing Club and that he was now the Water Safety Adviser for the Whitlingham boathouses and was holistically the person to coordinate rowing safety.

LB

LB

SB

6. Safety Management System

Hazard Review Update

The proposal for the stakeholder's review of the hazards to be undertaken every three years had been approved by the Navigation Committee and the Broads Authority and the updated version of the Safety Management System would be uploaded onto the Authority's website. It was stressed that the three yearly review would not deter any hazard being reviewed throughout the period by the BSMG as and when it was justified.

7. MAIB update – Love for Lydia

There had been a double fatality on a petrol engine boat due to Carbon Monoxide (CO) poisoning from the boats exhaust. The boat had been moored on its own at Wroxham Island with its engine running.

The Marine Accident Investigation Branch (MAIB) had conducted a number of tests and it was thought that a report would be published before the end of the year. It had been suggested that the findings could be benchmarked against Broads boats but it was felt that it would be better to wait for the outcome of the tests before a decision was made to carry out further testing. The MAIB had been asked to identify someone who would carry out the testing on behalf of the Authority.

It was further noted that there may be a possible issue for third parties if they moored close to a petrol engine boat with its engine running which may need to be explored once the findings of the report were published. The MAIB and Boat Safety Scheme (BSS) safety alerts issued following the incident were promulgated by the Authority and it was suggested that Hire Operators should take some form of action to advise hirers of the dangers of exhaust fumes from petrol engines. This had not been

undertaken by the BHBF as there was concern that this may scare and confuse hirers and it had been decided to await the findings of the MAIB report.

Discussion ensued over whether here had been an increased uptake in the purchase of CO alarms and where they should be located. It was confirmed that the BSS and the MAIB had produced large amounts of information with the general consensus that they should be installed on hire boats. The BSS had undertaken a full risk review and their current position was that CO alarms were only mandatory as a BSS requirement on hire vessels where a solid fuel stove was installed.

It was noted that the CO alarms alert at such low tolerances that they became a nuisance and therefore people either switched them off or removed the batteries. It was agreed that there was the need for an education programme to be developed with guidance on where the alarms should be located and how it is used.

SB

SB confirmed that he would update members as soon as there was any more information.

8. Channel Marker Post update

The Chairman reported that following a site visit to the River Chet the 37 channel markers were assessed to ascertain which were causing potential problems to the navigation and which ones could remain. A report was presented to the Navigation Committee who agreed that all the channel markers should be removed in 2017/18 with the work being scheduled and undertaken by the Authority. The Environment Agency (EA) had confirmed that they would make a contribution to the removal costs. Discussion ensued over the financial negotiations with the EA and it was confirmed that the Authority hoped to recover the costs for hiring in the equipment and something to cover staff time as there would be an impact on the dredging completed during 2017/18 with the annual dredging target of 50,000cubic meters possibly not being achieved.

Members noted that timing of the removal of the marker posts would be important due to the disruption to the navigation. It was reported that the Authority was looking to undertake the work during the winter period, using the same methodology used for dredging operations allowing access during evening and weekends and by keeping the navigation open with up to two hours delay. It was confirmed that Boatyards would be advised prior to the work commencing.

9. Hire Boat Code

SB reported that there had not been any real progress made to the Hire Boat Code Part 1 since the last meeting due to delays over stability issues for some narrow boats. AC confirmed that it had been reported at the Association of Inland Navigation Authorities (AINA) Executive

Committee meeting that the stability consultants needed more time. They were hoping for a 3 month consultation in September with implementation in 2018/19. This would mean that there would be further delays to the implementation of the Hire Boat Code Part 2 for unpowered vessels. The Authority confirmed they would continue to work with canoe operators to implement safety procedures already developed.

10. PSMC Notice to Mariners/Safety Alerts/ Report on Incidents

Notice to Mariners

No. 5 of 2016 – Dredging work in Haddiscoe New Cut, Monday 20th June 2016 through to Friday 30th September2016

Safety Alerts

Carbon Monoxide alerts.

Report on Incidents

LB gave a verbal update on incidents from March 2016 to August 2016.

- The majority of incidents were due to slips/trips/falls.
- There had been several collisions with bridges.
- Spirit of Breydon had provided lots of advice on the channel and bridge heights. TH confirmed he was looking at improvements to existing signage and other options.
- April a man had collapsed on Perci's Island. He had previously been pecked on the leg by a chicken which had caused an infection.
- June There had been two fatalities due to CO poisoning.
- July A diabetic man crossing Breydon water fell unconscious and went aground. He was removed from his vessel by the ILB and taken to hospital.
- August Vauxhall and Potter Heigham bridges were struck. There
 was a high speed RIB collision at Oulton Broad which is still being
 investigated. Members discussed the possible requirement for
 lights on moored vessels but it was pointed out that the vessel was
 outside the channel and that the 6mph speed limit had been well
 exceeded.

It was confirmed that the Authority was now working with all emergency services to ensure that information was being collected for all incidents.

In response to a question regarding props getting caught on erosion protection matting LB confirmed that she was not aware of any issues this year. AC stated that he was aware of an incident at Thurne Regatta although it had not been reported to the Authority. Discussion ensued regarding a hire vessel whose engine had failed and had drifted onto the gabions upstream of the steam pump at Strumpshaw. SB confirmed that

this would be useful information for when the Authority was reviewing the hazard log and it was also important to advise the EA.

A member commented that there were a high number of speed trials being undertaken both on Breydon Water and the upper Yare. It was confirmed that Broads Control were now advised when boat yards were undertaking speed trails as it was now a requirement for them to log on and off with them. It was noted that occasionally with prior permission of the Authority the area was also used by the Fire Service for training purposes.

11. Lowestoft & Oulton Broad Motor Boat Club 2017 Racing Fixtures

Members reviewed the draft racing fixture list for 2017 noting that there was no increase in race number. SB was asked to ascertain that the draft had been circulated to all the rowing and sailing clubs on Oulton Broad prior to presenting to the Navigation Committee.

SB

14. Any Other Business

Dredging in Yare 1 Zone – CT referred to an incident which had occurred near the Authority's dredging operations upstream of Commissioners Cut and expressed concern over the risks to racing craft if they were not aware of such activities being undertaken. It was confirmed that details of the dredging had been circulated to boatyards and the Authority's Notice to Mariners distribution lists and CT would now be included to enable the information to be disseminated to all the rowing clubs.

CB

15. Date of Next Meetings

Monday 27 February 2017 at 09:30 at the Dockyard

Chief Executive's Report

Summary:

This report summarises the current position in respect of a number of important projects and events, including any decisions taken during the recent cycle of committee meetings.

1 Asset Management Plan: Plant Vessel and Equipment Strategy – Purchase of Replacement Equipment

Contact officer/Broads Plan Objective: Rob Rogers/NA1.1

- 1.1 At the Authority's meeting on 30 September 2016, Members considered the update on the Vessel and Equipment Strategy and approved the additional expenditure of £166,000 from the Plant, Vessel and Equipment Reserve for the purchase of a second hand weed harvester, link floats and the replacement of small equipment to reduce hand arm vibration impact leaving the reserve at £77,535 at the end of the financial year.
- 2 Draft Policy on Waste Collection and Disposal in the Broads National Park

Contact Officer/Broad Plan Objective: Angie Leeper/TR1.1

- 2.1 At its meeting on 30 September 2016, the Authority approved the Draft Policy and proposed actions on Waste Disposal considered and supported by the Navigation Committee at its last meeting on 8 September 2016 i.e. that the Authority will work with the constituent County, District and Parish Councils and local businesses to encourage visitor and residents to minimise the creation of waste and recycle as much as possible. With those bodies it will also work to ensure that a network of strategic sites are in place; the Authority will fund the costs of appropriate facilities and disposal of rubbish from such strategic sites that it owns or controls and will work in partnership with the County, District and Parish Councils as well as commercial operators with the area to make appropriate provision. Members accepted the priority list of strategic sites identified within the report.
- Planning Application with Navigation Implications: BA/2016/0228/COND Hoveton Great Broad and Hudsons's Bay, Haugh lane, Lower Street, Hoveton: Variation of Conditions 2, 3 and 19 and Removal Conditions7, 11, 12, 20 and 24 from Permission BA/2014/0248/FUL Contact Officer/Broads Plan Objectives: Cally Smith/Nil
- 3.1 The application considered by the Navigation Committee at its last meeting was determined by the Planning Committee at its meeting on 16 September 2016. Members will recall that the removal of the conditions, the subject of the application, in effect would remove any work associated with Wroxham Island

and the disposal of sediment in the area, the result of which required amending the phasing schedule for the project. The Committee approved the application subject to conditions. They recognised that the project had been and was politically controversial but required a judgement to be made on the planning merits of what was before them. It was considered that in terms of public interest and on the basis of the scientific evidence, there would be considerable conservation benefits from the proposals especially bearing in mind the important designations of the area – Ramsar, SPA, SAC and SSSI.

4 Broads Authority Code of Conduct for Members Contact Officer/ Broads Plan Objective: David Harris/Nil

4.1 At its meeting on 30 September 2016, the Authority adopted a revised Code of Conduct for Members. This was following recommendations by the Auditors to review the code, consultation with the Authority at its meeting in July and scrutiny by the Financial Scrutiny and Audit Committee in July and September as well as review by the Authority's two Independent Persons. The Solicitor and Monitoring Officer will be issuing this to all Members including co-opted members for all to sign.

5 Appointment of Navigation Committee Contact Officer /Broads Plan Objective: John Packman/Nil

Members will be aware that Bill Dickson, who was originally appointed to the Navigation Committee in 2015, has now been appointed to the Authority by the Secretary of State. There is therefore a vacancy on the Navigation Committee and procedures need to be put in place to appoint a new member to the Committee. When examining the procedures for this to take place, it was considered opportune to look at ways of streamlining and improving the process. Consultation was undertaken with the officers of the Broads Hire Boat Federation (BHBF) and Norfolk and Suffolk Boating Association (NSBA) and advice was taken from Richard Card, President of the NSBA and former Professor of Law. A report was then taken to the Authority on 30 September 2016 and Members agreed to adopt a series of minor changes to the appointments procedures for the eight co-opted members on the Committee, naturally being mindful of the Broads Act.

The minor amendments include:

- (i) Point of consultation with listed organisations amended so that they are informed of the process and timetable at the outset but then consultation on the appointments takes place only once, when the Appointments Panel has short listed the applicants.
- (ii) The Independent Chair of the Appointments Panel to be one of the two Independent Persons of the Authority.
- (iii) The Navigation Committee to be consulted once, at the shortlisting stage, before the Panel interviews the shortlisted candidates.

- (iv) The maximum term of office amended to ten years for Co-opted members of the Navigation Committee to realign it with the return to the arrangement for Secretary of State Appointees.
- (v) Appointments to the Committee to be made from 1 April and the timetable for the process designed to meet that deadline.
- (vi) The Authority to continue to interpret category (d) of the Act ("bodies appearing to it to represent persons who are likely to be required to pay ship, passenger or goods dues") as referring to organisations representing the payers of tolls on craft in general.
- 5.2 The interpretation of category (d) was given particular attention since this is the category under which the vacancy exists. A concern had been expressed that this should be filled by those representing or being from the commercial sector. However, the Broads Authority has, since the Committee was first established in 1988, consistently interpreted this section as requiring consultation with Toll Payers in general. From the evidence in the minutes of the Broads Authority since 1988, the established practice, in line with the legal advice, has been to consult a wide range of organsiations on category (d) appointments including, for example, the Norfolk and Suffolk Yachting Association (now the Norfolk and Suffolk Boating Association) and the Norfolk Canoeing Association. Similarly the individuals appointed under the category have been from private as well as commercial backgrounds. Members were of the view that the most important element of the procedures was that it allowed for many different organisations to be alerted to a vacancy, such that a wide range of individuals are invited to apply and the best candidates appointed in line with requirements in the 1988 Act.
- 5.3 In addition, the Authority agreed that the current vacancy on the Navigation Committee be advertised for a replacement in October with an appointment running concurrently with the existing appointments until March 2019.

6 Bridges Update

Contact Officer/Broads Plan Objective: Angie Leeper/NA5

6.1 Network Rail's consultants are currently drawing up final reports of the Multi Criteria Stakeholder Analysis consultation. The outcome will help inform consideration of the options for the renewal, replacement or repair of Somerleyton and Reedham bridges. The final reports are expected sometime in November 2016.

7 Navigation Patrolling and Performance Targets Contact Officer/Broads Plan Objective: Lucy Burchnall/NA4.3

7.1 The report of the significant use of powers by the rangers is displayed in Appendix 1. The average navigation/countryside splits are higher on the navigation side as would be expected following the summer when patrolling is a priority. Achievement against targets remains good even with a large number of new staff who have undergone training this season.

7.2 There are no cases to report from the Magistrate Court for this period. A significant number of tolls cases are currently being processed and evidence on two navigation offences is being compiled.

8 Sunken and Abandoned Vessel Update

Contact Officer/Broads Plan Objective: Lucy Burchnall/NA4

- 8.1 The sunken and abandoned vessel update is contained in Appendix 2. Seven boats which had either sunk and/or were abandoned have been removed from the system or sold since the last report. A further one is at the dockyard while investigations into ownership continue.
- 8.2 Two boats remain sunk upstream of Trowse bridge and will be removed when our work boats are in that area later this year. One vessel has recently sunk at Pyes Mill Moorings. The owner is aware and the situation is being monitored.

9 Planning Enforcement Update

Contact Officer/Broads Plan Objective: Cally Smith/None

9.1 Following queries raised by a member, it was agreed to provide regular updates on the position regarding relevant planning enforcement actions. There are no outstanding enforcement actions with navigation implications to report to this meeting.

Background papers: None

Author: Sandra Becket / Esmeralda Guds

Date of report: October 2016

Broads Plan Objectives: Multiple

Appendices: APPENDIX 1 – Report on the Significant Exercise of Powers

by the Rangers during

APPENDIX 2 – Report of Sunken and Abandoned Vessels

				/P									nalysis to March 20	117)								Date) :	S	EP	ГЕМІ	BER	2016			
	Wroxh	am	Launc		Irstea			runi	Ludha				Ludham 2		nch	Norwich	ı Laı	ınch		Hardle	ev L	auncl	,	B.St.P	eter	Laun	ch	Breydo	n La	unch	$\overline{}$
Launch Patrol Areas	Wroxha Upper B	m ar		••	Ant	<u></u>			Hickling Upper Womad	g, P. Thur	Heigh		Lower Thurn Bure & South Walsi	e, Lo	_	Norwich a	and			Reedha Middle	am,	Chet 8		Oulton Upper/l	Broad	d and		Breydor Lower V and Yar	n Wat Vavei	ter,	
Verbal Warnings																															
Care & Caution	2	(24)	1	(27)	12	(28)	(124)	61	(69)					1	(8)	4	(17)
Speed	513	(3137)	459	(1635)	120	(623)	(654)	6	(136)	9	(123)	15	(201)	10	(134)
Tolls offences		(9)		(44)	1	(12)	(88)	51	(62)						(4)		(3)
Other	4	(57)	3	(34)	6	(27)	(83)	4	(12)		(5)	1	(21)		(5)
Blue Book Warnings									•											•											
Care & Caution		(16)		(5)	1	(1)	(1)		(1)									1	(1)
Speed	23	(77)	5	(30)	2	(5)	(9)	7	(11)		(4)		(7)		(5)
Other	3	(16)	2	(16)	1	(6)	(2)		(1)		(2)		(10)	1	(11)
Reports for Prosecutions						(1)																					(1)
Special Directions		(2)		(143)												11	(68)	26	(155)		(18)
Toll Compliance Repo	rts																														
Non Payment	27	(120)	22	(126)	2	(76)	(26)	17	(96)					10	(120)	7	(49)
Non Display	13	(22)	1	(5)		(7)	(2)									6	(6)		(3)
28 Day request for information																								2	(7)				
BSS Hazardous Boat Inspections						(1)									(1)										(1)
Enter Vessels Under BSS																	(1)												
Launch Staffed (by Ranger)	30	(174)	27	(128)	26	(133)	19 (126)	26	(122)	20	(111)	23	(110)	30	(183)
Country Site Inspection Reports Percentage Compliance	100%	(100%)	43%	(90%)	(Comb	ine	d figui	re)	100% (100%	6)	(Combine	ed fig	ure)			(83%)		(67%)	n/a			
Best Value Patrol Targets Percentage Compliance	69%	(95%)		(83%)		(83%)	(83%	,)		(64%)		(69%)		(74%)		(78%)
Volunteer Patrols		(3)	1	(13)	1	(2)	(1)						(8)								
IRIS Reports		(94)		(55)		(23)	(20)		(33)		(23)		(50)		(60)
Broads Control Total Calls	1	гот	ΓAL		2,140) (22,040)					Те	leph	one	1,799	(18,110)				VHF	341	(3,930)				

		ER TEA		VITY						18 Octo							i	
	Navigati	ion Activ	ity						Country	side Acti	vity							
September	Patrol Launch	Patrol Foot/Road	Incident Working	Admin - Navigation	Training (Navigation)		Moorings Maintenance		atrol	Country Maintenance	Country	Training (Countryside)	Equipment Maintnance	free/Ground work	ivities	Education/School Visit	Country	73% 27%
2016	itrol	itrol	بر ۱۲ ∨	Ž.	J) Bı		l sgu	vork	ک	∑ >-	1)) ရွ	nen.	irou	Acti	ion,	Time Off not included	
	Nav Pa	Nav Pa	Incider	Admin	Trainir	Escort	Moorii	Bank work	Country Patrol	Countr	Admin	Trainir	Equipr	Tree/G	Group Activities	Educat	"	
Percentage Total	39.03%	3.63%	1.14%	0.30%	0.57%	0.09%	0.82%	0.75%	2.13%	6.54%	0.10%	1.24%	4.72%		0.50%	0.43%		
Wroxham team	20%	44%	11%		10%	35%	64%	27%	36%	21%	70%		28%			46%		
Thurne team	27%	20%		52%	39%		34%	73%	23%	24%	10%	18%	25%		16%			
Yare team	17%	5%	53%	41%		29%			22%	45%	20%	15%	17%		37%			
Waveney team	10%	4%	29%		51%				4%	4%		30%	10%			54%		
Breydon team	20%	21%					15%			3%		18%	17%					
Control Officer												20%						
				48	8%							13	3%					
	General	Support											Time Of	f				
	Broads Control	Travel Time	Bank Work - Split	Activity Unknown	Training - Split	Meeting - Staff	Meeting - Public	Admin - Split	Admin - Volunteer	Training - (Volunteers)	Public Relations Event	Site Visit third party	Other Task	Time off in Lieu (not accurate)	Breaks (not including un- notified breaks)	Annual Leave		
Percentage Total	7.86%	3.30%	0.16%	5.96%	0.62%	3.02%	0.23%	8.16%	0.10%	0.06%	0.14%	0.04%	1.02%	0.12%	2.86%	4.36%		
Wroxham team	6%	24%		30%	23%	25%	2%	19%		25%	100%		3%	175%	16%	26%	Percentage with a	
Thurne team	4%	18%		26%		18%	7%	21%	95%				17%		28%	21%	Year to date	<u>'</u>
Yare team		21%		5%		13%	30%	32%	5%	25%		100%	44%	13%	16%	16%	Navigation	72%
Waveney team		12%		1%	78%	10%		11%					14%		2%	5%	Country	28%
Breydon team		23%		5%		9%		11%					6%		2%	32%	Total	100%
Control Officer	67%														21%		Time Off no	t included
	7%	4%						26%							5%			

Team percentages equal team contribution to activity

APPENDIX 2

Sunken and Abandoned Vessels

Description	Location found	Action	Abandoned /Sunken Notice Affixed	Result
Sunken and abandoned wooden sailing cruiser	River Yare, Trowse	No known owner	Yes	Deadline expired and BA team will raise and remove when the programme allows (scheduled November).
Sunken cruiser	River Yare Old River Thorpe.	Vessel sunk at owners moorings	No	Not affecting the navigation owner will raise in due course
Sunken Wooden Cabin Cruiser	River Wensum Norwich	Vessel sunk at moorings.	No	Owner has pumps in position ready to raise the vessel.
Abandoned Vessel	Beccles	Abandoned vessel on moorings	Yes	Ownership claim unfounded, being brought to Dockyard
Abandoned Cruiser	Hickling	Vessel abandoned on Hickling Broad	Yes	Investigating ownership claims
Wooden Motor Cruiser	River Yare, Postwick reach	Vessel sunk on owners mooring	No	Not affecting the navigation owner will raise in due course
Sunken cruiser	Pyes Mill	Vessel sunk on moorings	No	Owner aware, ongoing monitoring of situation