

Agenda 02 September 2021

10.00am

Yare House, 62-64 Thorpe Road, Norwich, NR1 1RY

John Packman – 25 August 2021

Introduction

- 1. To receive apologies for absence
- 2. To receive declarations of interest
- 3. To note whether any items have been proposed as matters of urgent business
- 4. Public question time to note whether any questions have been raised by members of the public
- 5. To receive and confirm the minutes of the Navigation Committee meeting held on 10 June 2021 (Pages 2-8)
- 6. Summary of actions and outstanding issues following discussion at previous meetings (Pages 9-11)

Reports for information

- 7. **Chief Executive's report and current issues** (Pages 12-18) Report by Chief Executive
- 8. Waterways Management Strategy and Action Plan 2022/23 to 2026/27 (consultation draft) (Pages 19-29)
 - Report by Head of Construction, Maintenance and Ecology
- 9. Construction, Maintenance, and Ecology work programme progress update (Pages 30-34)
 - Report by Head of Construction, Maintenance, and Ecology, and Ecology and Design Supervisor
- Navigation Income and Expenditure 1 April to 30 June 2021 actual and 2021/22 forecast outturn (Pages 35-51)
 Report by Chief Financial Officer

Other matters

11. To note the date of the next meeting – Thursday 21 October 2021 at 10.00am



Minutes of the meeting held on 10 June 2021

1.	Apologies for absence	2
	Recordings	2
2.	Declarations of interest	2
3.	Matters of urgent business	2
4.	Public question time	2
5.	Minutes of last meeting	2
6.	Summary of actions and outstanding issues following discussions at previous meeting	ıgs2
7.	Chief Executive's report and current issues	3
	Clean Maritime Bid	3
8.	Carrow Road Bridge repairs	3
9.	Delivery of mooring provision within the Integrated Access Strategy Action Plan 2019-21	4
10.	South Walsham slipway	5
11.	Mutford Lock – operations and risk assessment	5
12.	Annual income and expenditure 2020/2021	6
13.	Construction, maintenance and environment work programme progress update	6
	Maintaining water depths for navigation	6
	Resources	6
	Other navigation works	7
14.	Date of next meeting	7

Present

Nicky Talbot – in the Chair, Linda Aspland, Mike Barnes, Harry Blathwayt, Matthew Bradbury (from item 7), Greg Munford, Simon Sparrow.

In attendance

Dan Hoare – Head of Construction, Maintenance and Ecology, Emma Krelle - Chief Financial Officer, Sarah Mullarney - Governance Officer, John Packman - Chief Executive, Rob Rogers - Director of Operations, Adrian Sewell – Rivers Engineer.

1. Apologies for absence

Apologies were received from John Ash, Andy Hamilton, Leslie Mogford, Paul Thomas, and Alan Thomson.

Comments regarding agenda items 7 - 11 were received from John Ash, Paul Thomas, and Alan Thomson. They were read out by the Chair and formed part of the discussion.

Recordings

The Chair announced that the meeting would be recorded and that the copyright remains with the Authority; however, a copy of the recording could be requested from the Governance team.

2. Declarations of interest

There were no additional declarations of interest to declare.

3. Matters of urgent business

No items were proposed as a matter of urgent business.

4. Public question time

No public questions were raised.

5. Minutes of last meeting

The minutes of the meeting held on 15 April 2021 were approved as a correct record and would be signed by the Chair.

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

Members received a report summarising the progress of issues that had recently been presented to the Committee.

There were no further updates and the report was noted.

Chief Executive's report and current issues

The Director of Operations provided an update on the safety package previously approved by members. Rangers were now able to patrol the network 7 days a week, facilitated by the extra Rangers in the team, and the designated Compliance Ranger who focused on prosecution work, a task that would have previously taken Rangers off the network. It was also reported that additional super safety days and ad hoc checks had been held.

Clean Maritime Bid

Members supported the application for renewable energy schemes and discussed exploring hydrogen fuel technology as an alternative to electric solutions.

The Head of Construction, Maintenance and Environment (CME) explained that the use of Hydrotreated Vegetable Oil bio diesel fuel was being trialled in Broads Authority excavators and wherries. The Authority was in discussion with the Internal Drainage Board (IDB) regarding shared bulk purchase and use of the IDB's existing fuel storage.

The report was noted.

8. Carrow Road Bridge repairs

Members felt very strongly about Norfolk County Council's (NCC) proposed temporary (5-year) closure to facilitate repairs of Carrow Road Bridge. They discussed the implications of the proposal and fears that it would result in a more permanent closure.

The Committee discussed the contents of the NCC Options report, with one member expressing disappointment with the lack of justifications for closing the bridge. A member said it was unacceptable to close the bridge for this period of time, adding that it would be the end for tall vessels reaching the Port of Norwich. Another member commented that the NCC Options report failed to consider whether low demand from taller vessels was due to the difficulties in making the passage to access the bridge. It was suggested that an operating opening bridge would encourage more visiting vessels into the centre of Norwich.

The Chief Executive (CEO) clarified that his understanding was the NCC report now presented to the Committee had been produced subsequent to the summary report considered by the NCC Cabinet and previously shared with the Broads Authority's members. It was through further discussions with the NCC Director of Highways and Waste that the temporary closure was identified as a minimum of 5 years. The CEO explained that the repairs could reveal more fundamental problems with the bridge, which could result in a longer-term closure needed for repairs.

It was suggested by one member that a new bridge be built; he said it was an important crossing that required a more substantial repair, and urged NCC to be more enthusiastic about the prospect. Another member said it was not known what would be needed for Norwich in the future and that the Committee needed to fight to keep the bridge open. A member said the Committee should object to NCC's proposals from a strategic and navigation point of view. He expressed concern that NCC and other local authorities were not using a

strategic approach for the area and it was short sighted decision making that didn't take navigation into account. He said the possibility of a permanent closure should be taken very seriously. It was added that NCC should be encouraged to look at a long-term approach, as there was an opportunity for Norwich to embrace the river front much as other cities had.

The Chief Executive said that these specific repairs were part of a wider issue in terms of the future for navigation and the use of the river in Norwich. He discussed the changing commuter habits and different ways of working as a result of the Covid-19 pandemic, which had put into question the level of rail infrastructure needed. It was explained that recent work at Trowse bridge had shown that there was still capacity in the single swinging rail bridge to meet predicted demands in traffic on the railways. He concluded that a long-term, strategic approach was needed.

The Chair concluded that the strong feelings of the Committee needed to be shared with NCC. From a navigation point of view, there was a legal obligation to keep the bridge open. Members agreed that it was the Navigation Committee's duty to protect and preserve the rights of navigation and said that granting a Works Licence for the repairs as proposed would be in contravention of the Authority's statutory duty. However, members were in favour of working with NCC to find a solution so both organisations could meet their obligations.

Simon Sparrow proposed, seconded by Matthew Bradbury and members unanimously supported the following statement:

The Navigation Committee is of the view that Norfolk County Council's proposal to carry out a minimal repair to Carrow Road Bridge, effectively welding it shut so it is unable to open to tall vessels, is totally unacceptable. It would be contrary to the County Council's legal obligations, under the Norwich Corporation Act 1920, which are to maintain and operate the bridge to allow vessels that require passage to pass. In our view, officers should refuse any Works Licence application for this superficial repair work and the County Council should be encouraged to perform repairs in a way that maintains navigation rights to this historic and important gateway to Norwich, in accordance with the legislation.

The Broads Authority would like to work with the County Council to find a solution that meets the statutory obligations of both organisations.

9. Delivery of mooring provision within the Integrated Access Strategy Action Plan 2019-21

The Chief Executive thanked the Director of Operations, Head of CME, and Rivers Engineer for their work. He introduced the interim report which provided members with an update on progress with the Integrated Access Strategy action plan and a prioritised list for the replacement of piling.

It was explained that piling was a big issue for the Authority as moorings were being lost due to the changes to the flood defences made by the Broadland Flood Alleviation Project (BFAP). The Authority's preference was to purchase sites for the mooring network; however, if this

was not possible, then a long-term lease would be sought to justify the investment in replacing the piling. The CEO said the Authority could not afford to take on responsibility for sites without the security of tenure through purchase or a long lease.

Members commended the report and the level of detail provided. A member also shared appreciation for the work completed at St Benet's, noting the difficulties in negotiations with the landowner. He said the extra height of the key heading had added safety to the moorings.

Further information on the work of the Authority's network of mooring assets would be presented to the Committee when available.

The report was noted.

10. South Walsham slipway

Members discussed the proposals to improve the access arrangements at South Walsham slipway.

A member said if the barrier were removed it would encourage other boat owners to launch bigger vessels, adding that if tourism was to be encouraged then parking and public conveniences also needed to be considered.

Another member likened the facility to the Hickling slipway, which was easy to access and was an asset to the village. He would like to see more access to South Walsham slipway to the general public, noting that the use of small boats such as canoes or paddle boards provided exercise.

Greg Munford proposed, seconded by Simon Sparrow and it was unanimously recommended that the Broads Authority remove the locked barrier for a trial period to allow open access.

11. Mutford Lock – operations and risk assessment

The Rivers Engineer outlined the proposals to restrict the beam width of vessels using Mutford Lock to 6.05m, and to suspend the procedure of free flow until further notice. In response to a member question, he said the number of vessels of that width using the Lock averaged 1 or 2 per year and that 2015 was the last time free flow was used.

Members were in support of the proposal. One member commented that Mutford Lock was a principal gateway to the Broads and was very important to the navigation. It was an important route for a number of commercial operators. Another member commented that restrictions on its use could impact commercial traffic and they may wish to request passages outside these new limits. The CEO acknowledged the old age of the Lock and that, as the owners, the Authority needed to be careful in terms of management whilst encouraging its use.

The Rivers Engineers discussed the long-term plans for Mutford Lock. He said a third hydrographic survey would be conducted to identify any problems. The maintenance bill was an estimated £1.65 million over the next 40 years. A member suggested reserving additional

money each year to ensure the Authority had the funds for any major repairs, in light of any problems identified from the survey.

The Director of Operations clarified that the proposed restricted width would not prohibit Reedham chain ferry from passing through the Lock.

Simon Sparrow proposed, seconded by Greg Munford and members unanimously recommended the following proposals:

- A reduction in maximum vessel beam width to 6.05m when making passage through the lock system; and
- Free-flow unavailable until further notice.

12. Annual income and expenditure 2020/2021

The Chief Financial Officer explained that there had been some delays to the completion of the Statement of Accounts due to issues with the fixed asset revaluations and staff changes within the Finance team. Members would be made aware when it was available to view on the Broads Authority's website.

The hire craft tolls income at the end of May was £15,216.95 above the annual budget, assuming the remaining split pay of £666,194.10 is collected. For private craft tolls, income was £20,874.44 below the annual budget, but this continued to improve on a daily basis.

Negotiations for staff pay increases were being conducted by the National Joint Council (NJC), however an offer of a 1.5% increase had been rejected by the unions. The Authority has budgeted for a 2% increase.

13. Construction, maintenance and environment work programme progress update

Maintaining water depths for navigation

Approximately 44,000m³ had been dredged of the 41,000m³ target for the 2020/21 programme. The Head of CME explained that a previous target of 50,000m³ was from the 2007 Sediment Management Strategy and included all waterbodies in the Broads Authority executive area, including those outside the public navigation area. Targeting dredging where of greatest benefit for waterways users is the priority.

Resources

Appendices 2 and 3 of the report included details of the proportion of time spent by the Operations teams on various navigation works. It was explained that some flexibility in optimising the works programme was achieved through mixing expenditure from the revenue budgets with the fixed staff resource. This demonstrated that any additional responsibility, such as the acquisition of new moorings, would either impact the existing work programme or require more budget.

A member commented that the addition of the information provided in appendices 2 and 3 had been helpful.

Other navigation works

Members were presented with the revised timetable for the Waterways Management Strategy. The strategy aims to include other activities that influence and benefit waterway users. It will also explore different ways of managing the navigation, including more accurate hydrographic (sediment) modelling and climate change objectives. The draft document will be presented to members at the Navigation Committee meeting in September.

The report was noted.

14. Date of next meeting

The next meeting of the Navigation Committee would be held on Thursday 2 September 2021 commencing at 10am.

commencing at 10am.
The meeting ended at 15:25
Signed
Chairman



02 September 2021 Agenda item number 6

Summary of actions and outstanding issues following discussions at previous meetings

Title	Meeting date	Lead officer	Summary of actions	Progress so far	Target date
Network Rail Whole Life Strategy	19/10/2017	John Packman	Network Rail Whole Life Strategy planning for swing bridges and replacing Trowse Swing Bridge with fixed bridge.	Dec 2020: Update provided in CEO report (14/01/2021): Authority officers are involved in meetings to discuss the future of Trowse Swing Bridge and the development opportunities in East Norwich presented by three large brownfield sites, namely the Carrow Works, the Deal Ground and the Utilities Site. The Chief Executive and Director of Operations are members of a working group looking at the Trowse Bridge (along with Network Rail, Abellio Greater Anglia, Norfolk County Council, Norwich City Council and New Anglia). The Head of Planning and the Senior Planning Officer sit on another group looking at the development sites. There is an important relationship between the two issues and our officers are making sure that navigation interests are considered. Mar 2021: The Director of Operations met with Network Rail to discuss the multimillion pound refurbishment of the swing bridges (Reedham, Somerleyton & Oulton) due to commence in 2022. The NR scheme will see the lifting and turning mechanisms replaced to make the operation of opening and closing the swing bridges more reliable. At the start up meeting, the BA asked if the thermal expansion to the bridges in warm weather could also be addressed. This is being considered by Network Rail. The BA is working with NR on communications, work planning and managing the navigation. July 2021: The Director of Operations met with Network Rail contractors undertaking the swing bridge refurbishment to discuss the initial navigational requirements of the works. The refurbishment has been complicated further by the timing of the track closure, which will coincide with the school Easter holidays in 2022. The BA continues to advise on construction and navigational matters.	

Title	Meeting date	Lead officer	Summary of actions	Progress so far	Target date
Planning application with navigation implications: BA/2018/0466/FUL – Land at Burgh Castle – BFAP Compartment 34	17/01/2019	Rob Rogers	Lease arrangements and repiling at Burgh Castle for reinstatement of free 24-hour moorings.	Following an exempt paper considered at Navigation Committee and Broads Authority, officers presented the landowner with a series of options on an alternative Burgh Castle mooring site, based on recommendations in the exempt report. 16 Jan 2020: Members supported 99-year lease agreement, including BA taking on full responsibility for piling structure. 21 Jan 2020: Management Team agreed 99-year lease at peppercorn rent and for BA to take full responsibility for piling structure at Burgh Castle moorings. 27 May 2020: Development and improvements at Belton Reach (new name for Burgh Castle's moved mooring location) progressing from operational plannning perspective, but project deferred to 2021/2022 due to Covid-19 impact on funding issues. 15 Dec 2020: Following funding review by Environment Agency, plans to pile original Burgh Castle mooring site reinstated - EA negotiating site access with landowner with view to start pilings works this winter. Separate negotiation taking place between BA and landowner to agree terms of lease for site to enable operation as BA 24-hour free mooring. 30 Mar 2021: Environment Agency contractors on site and repiling of Burgh Castle underway. Summary discussions held with landowner's solicitor and draft lease for site under consideration. 17 May 2021: Environment Agency completed piling and installing new timber to pile tops. BA sorting lease details with landowner, so when site works are finished it can reopen mooring site - projected timescale is late June 2021. July 2021: Re-piling of the Burgh Castle mooring is completed. The legal agreement between the BA and the landowner is with the landowner's Solicitor. We await the completed document, and the site can then be re-opened as a BA 24 hour mooring.	30/06/2021
Landscapes Review	16/01/2020	John Packman	Navigation Committee asked to comment on BA's proposed response to Landscapes Review (Glover report) - to be reported to BA meeting on 31 Jan 2020.	31 Jan 20: BA report on Landscapes Review Proposal 27: A new financial model – more money, more secure, more enterprising; "unnecessary complexities, such as the requirement for the Broads Authority to account for income and expenditure from National Park Grant separately should be addressed." BA draft response is that it would be a Government decision whether to combine the finances and the BA would await the Government's response. Dec 2020: Still awaiting Government response. May 2021: Written Ministerial Statement expected in late May/early June. 24 Jun 2021: Ministerial Statement released. The Government will address the Landscape Review's recommendations in full and consult on draft proposals later this year.	

Title	Meeting date	Lead officer	Summary of actions	Progress so far	Target date
Carrow Road Bridge Repairs	15/04/2021	John Packman	Briefing provided at the Committee meeting outlining Norfolk County Council's proposals for the repair of Carrow Road bridge; further information awaited from NCC.	10 Jun 2021: Report on the Carrow Road bridge repairs presented to members with the Norfolk County Council (NCC) options report. The Navigation Committee is of the view that NCC's proposal to carry out a minimal repair to Carrow Road bridge, effectively welding it shut so it is unable to open to tall vessels, is totally unacceptable. It would be contrary to NCC's legal obligations, under the Norwich Corporation Act 1920, which are to maintain and operate the bridge to allow vessels that require passage to pass. In our view, officers should refuse any Works Licence application for this superficial repair work and NCC should be encouraged to perform repairs in a way that maintains navigation rights to this historic and important gateway to Norwich, in accordance with the legislation. The BA would like to work with NCC to find a solution that meets the statutory obligations of both organisations. Aug 2021: The Chief Executive and Director of Operations met with officers of Norfolk County Council on 17 August to discuss the road bridge repairs following the report to Navigation Committee and NCC wanting to temporarily seal the bridge close for 5 years. The BA is offering collaborative working to find an agreeable solution that protects the rights of navigation.	10/06/2021

Date of report: 10 August 2021



02 September 2021 Agenda item number 7

Chief Executive's report and current issues

Report by Chief Executive

Purpose

To give a briefing on significant matters relating to the maintenance and management of the waterways, and allow members to raise any such issues.

Contents

1.	Broads Authority – 23 July 2021	1
2.	Farming in Protected Landscapes (FiPL)	2
3.	Navigation patrolling and performance targets	2
4.	Sunken and abandoned vessel update	2
5.	Planning enforcement update	2
Appe	endix 1 – Rangers exercise of powers analysis June – July 2021	3
Appe	endix 2 – Ranger duties: total time allocated and actual days	5
Appe	endix 3 – Sunken and abandoned vessels current position as at 18 August 2021	7
Agge	endix 4 – Prosecutions dealt with in court for non-payment of tolls since 02 June 2021	7

Broads Authority – 23 July 2021

- 1.1. Members adopted the Residential Moorings Guide at the annual meeting on 23 July.
- 1.2. Members also adopted a revised Member Code of Conduct, based on the Local Government Association's new National Model Councillor Code of Conduct. The revised code is similar in principle to the previous code adopted by the Authority, but the terminology has been updated to better reflect the Localism Act, particularly in terms of the categories of interest. The Declaration of Interests form has also been updated.
- 1.3. The revised Code also includes the previously existing provision regarding the setting of tolls by boat owners. This enables a member who owns a boat and pays a toll (outside of a business) to attend and vote on matters concerning the setting of tolls. The

Navigation Committee, 02 September 2021, agenda item number 7

Monitoring Officer can grant a dispensation for members with a Disclosable Pecuniary Interest to participate in discussions at Navigation Committee, as it is a non-decision-making body. The annual tolls briefing also provides an opportunity for all members to contribute to discussions.

Farming in Protected Landscapes (FiPL)

2.1. This new grant scheme for farmers and landowners has got off to a good start and 5 grant applications will be considered at the Land Management Board on 24th August. The Authority is working in partnership with the Norfolk Coast AONB on the delivery of the programme.

3. Navigation patrolling and performance targets

3.1. The report of the significant use of powers by the Rangers is at Appendix 1 and reflects the busy period. Appendix 2 shows the average navigation/countryside splits; these are higher on the navigation side, as expected during the summer when patrolling is a priority.

4. Sunken and abandoned vessel update

4.1. The sunken and abandoned vessel update is at Appendix 3. Two vessels have recently been issued abandoned vessel notices.

5. Planning enforcement update

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

Author: John Packman

Date of report: 20 August 2021

Appendix 1 – Rangers exercise of powers analysis June – July 2021

Appendix 2 – Ranger duties total time allocated and actual days

Appendix 3 – Sunken and abandoned vessels current position as at 18 August 2021

Appendix 4 – Prosecutions dealt with in court for non-payment of tolls since 02 June 2021

Appendix 1 – Rangers exercise of powers analysis June – July 2021

Table 1

Verbal warnings	Wroxham launch Wroxham and upper Bure	Irstead Iaunch Ant	Ludham launch Hickling, Potter Heigham, upper Thurne	Ludham launch 2 lower Thurne and lower Bure	Norwich launch Norwich and upper Yare	Hardley Launch Reedham, Chet and middle Yare	Burgh St Peter launch Oulton Broad and upper/ middle Waveney	Breydon launch Breydon water, lower Waveney and Yare
Care and caution	40	31	21	27	9			6
Speed	1554	731	313	247	65	90	56	34
Other	110	49	7	14	16	32	1	14

Table 2

Written warnings	Wroxham launch	Irstead launch	Ludham launch	Ludham launch 2	Norwich launch	Hardley Launch	Burgh St Peter launch	Breydon launch
Care and caution	4	1		1	1	1		1
Speed	24	7	4	6		1		2
Other	11	18	6		1	6	1	
Special directions	19	3						

Table 3

Launch patrols	Wroxham launch	Irstead launch	Ludham launch	Ludham launch 2	Norwich launch	Hardley Launch	Burgh St Peter launch	Breydon launch
Launch staffed by ranger	61	59	55	56	54	51	57	60
Volunteer patrols	1		2	1			1	
IRIS reports	9	14	11	8	18	13	6	9

Table 4Broads Control total calls

Contact method	Number of calls
Telephone	6018
VHF	1327
Total	7345

Appendix 2 – Ranger duties: total time allocated and actual days

Table 1Broads Authority corporate duties

Work area	Annual allocation (days)	Actual days to date
Training	134	34.12
Broads Control	362	147.20
Team meetings, work planning	356	139.66
Partnership working	76	10.10
Assisting other sections	76	29.86
Billets and boatsheds	25	10.95
Launch – general		5.81
Trailers - general		0.27
Vehicle maintenance		2.16
Other equipment repair		4.05
Total	1029	384.18

Table 2Navigation duties

Work area	Annual allocation (days)	Actual days to date
Patrolling	2136	975.17
Escorts	49	21.08
Prosecution files		5.14
Bankside tree management	53	0.20
Obstruction removal	36	10.27
Channel markers and buoys	25	2.03
Signs and boards maintenance	34	20.61
Adjacent waters	100	42.09
Reactive mooring maintenance	104.5	5.81
Total	2537.5	1082.40

Table 3Conservation, recreation, countryside maintenance

Work area	Annual allocation (days)	Actual days to date
Fen management	195	5.34
Lake, riverbank restoration	126	4.32
Invasive species control	22.5	12.56
Other conservation work	148	26.82
Pollution response		1.62
Visitor site maintenance	209	164.80
Public engagement	301	38.89
Public footpath work	44	7.30
Education work	69	11.69
Total	1114.5	273.34

Team total up to 14 August 2021

Percentage Navigation: 80% Percentage National Park: 20%

Appendix 3 – Sunken and abandoned vessels current position as at 18 August 2021

Description	Location found	Action	Notice affixed	Result	
Motor Cruiser	River Yare, old River Thorpe	Vessel sunk at owners' moorings	No	Not affecting navigation	
Motor Cruiser	Sutton/Stalham Cut	Remaining concrete hull marked. An assessment will be made if this can be raised by the dredging rig when it is next in the area.	No	Not affecting navigation	
Workboat	River Yare, old River Thorpe	Vessel sunk at owner's moorings	No	Working with owner to raise	
Aux Yacht	Whitlingham	Owner unknown	Yes	Deadline 25/8	
Motor Vessel	Drifting on Yare	Taken to Dockyard, owner unknown	Yes	Deadline 24/8	

Appendix 4 – Prosecutions dealt with in court for non-payment of tolls since 02 June 2021

Type of vessel	Vessel name	Fined	Costs awarded	Victim surcharge	Compensation
Motor Boat	Pearly	£250.00	£175.00	£34.00	£69.90
Motor Boat	Rum Runner	£335.00	£190.00	£34.00	£335.52
Houseboat	Buttercup	£250.00	£175.00	£34.00	£71.50
Motor Boat	Hakuna Matata	£250.00	£175.00	£34.00	£181.74
Motor Boat	Loch Leven	£500.00	£190.00	£50.00	£243.04



02 September 2021 Agenda item number 8

Waterways Management Strategy and Action Plan 2022/23 to 2026/27 (consultation draft)

Report by Head of Construction, Maintenance & Ecology

Purpose

This report seeks the views of the Navigation Committee on the draft Waterways Management Strategy and Action Plan 2022/23 to 2026/27. The strategy provides a framework for the integrated, sustainable and cost-effective management of the navigable waterways in the Broads Authority Executive Area, drawing together all the objectives and management techniques used to manage navigational access in the area. A set of key issues are presented for comment, focussing on some of the technical detail that will shape future prioritisation methods, scope of works and reporting processes.

Broads Plan context

The Waterways Management Strategy will contribute to multiple objectives, in particular those under Aspirations 3, 4 and 6 to manage sediment sustainably, maintain a safe open navigation, and maintain the access network and visitor facilities.

Contents

1.	Introduction	2		
2.	Consultation	3		
	Update of mean low water level – the sediment modelling baseline	3		
	Revision of waterways specifications inside and outside marked channels	3		
	Revision to Breydon-Lower Yare commercial waterways specification	3		
	Revision of waterways specifications – above and below the water	4		
	Introducing internal carbon pricing	4		
3.	Feedback	5		
Appendix 1 – Map of waterways specification depths				
Apper	ndix 2 – Waterway specification for inside and outside of marked channels	7		

1. Introduction

- 1.1. The publicly accessible rivers, broads and channels within the Broads Authority Executive Area form the geographic extent of the Waterways Management Strategy for activities carried out by the Broads Authority. The character and use of the different parts of these publicly accessible waterways varies considerably. This means that a fixed management approach would not give the best outcome for recreational users or for environmental considerations, or allow efficient deployment of Authority resources. The finite level of staffing and budgets available each year for managing the waterways means that a clear prioritisation process of works is critical.
- 1.2. The vision in the Broads Plan (2017) relating to navigation within the Broads waterways is that: "The past and present importance of the waterways for navigation, biodiversity and recreation is recognised and cherished, and the asset is protected, maintained and enhanced. Wildlife flourishes and habitats are maintained, restored, expanded and linked effectively to other ecological networks. Land and water are managed in an integrated way, with local and landscape scale management creating resilience and enabling flexible approaches to meet changing environmental, economic and social needs."
- 1.3. To work towards this vision, three overarching aims are proposed for the Waterways Management Strategy:
 - User experience: The Broads Authority shall manage the navigation area so that users feel informed and safe, have an enjoyable experience and are able to appreciate the special qualities of the Broads environment.
 - Integrated management: The actions carried out by the Broads Authority shall be targeted so that resource use is efficient, to have biodiversity protection and carbon reduction is embedded throughout and, through working with landowners and other statutory bodies, to ensure works are carried out according to best practice.
 - Transparency: The Authority shall monitor the condition of the waterways, have a clear, evidence-based prioritisation process for arranging work programmes and have open communication with stakeholders to incorporate user feedback. A 5-year plan shall be produced, with regular progress reported.
- 1.4. The draft Waterways Management Strategy has sections covering:
 - Developments in legislation and policy
 - Principles of waterways management
 - Detailed objectives for the different techniques of waterways management (sediment management, water plant management, riverside tree management, bankside habitat & erosion management and channel marking)
 - Reporting and communicating progress

Technical appendices

Consultation

2.1. Five key areas are presented for targeted consultation, as set out below.

Update of mean low water level – the sediment modelling baseline

2.2. As water levels vary daily and seasonally, a modelled water level that can be used as a standard reference is required when setting a target water depth in the rivers and broads. Waterways specification depths are presented in the map in Appendix 1 of this report. To ensure that the specification depth is present at most states of tide, the reference water level is taken as the average level at low water (or mean low water). Data from river level gauges operated by the Environment Agency has been used to calculate mean low water level at 18 stations across the navigable system. The values for mean low water level have been updated from those previously used, which were based on data available in 1993. The difference between the two baselines is that the new model baseline is an average of 11.8 cm higher than previous. Sediment volumes causing non-compliance with the waterway specification depths have been subsequently recalculated. Across all the navigable broads and rivers, the greater accuracy of the mean low water level model at the new, slightly higher levels has reduced the total sediment volume identified as requiring dredging from 1,010,000 m³ to 815,430m³.

Revision of waterways specifications inside and outside marked channels

2.3. To aid the reporting of compliance against waterways specification targets, the navigation area has been broken down into Management Units. These are definable stretches of river, individual broads, or marked channels within broads, where there is some level of uniformity of usage or general physical character. To help clarify the waterways specifications in waterbodies with marked channels, Appendix 2 shows where there are examples of two specifications, both within and outside of a marked channel. Significant volumes of sediment not meeting current waterways specifications can be found outside the marked channels, for example in Hickling Broad (191,550 m³) and Rockland Broad (103,260 m³). These two management units contribute 36% of the total identified dredging requirement for the whole of the Broads navigation. Separation of management units helps focus priorities. Many of these proposed changes are to regularise existing, but undocumented management specifications and to bring similar sites into a more consistent management approach.

Revision to Breydon-Lower Yare commercial waterways specification

2.4. A managed channel depth of 4m (below mean low water) has previously been reported for Breydon Water to Cantley. As commercial freight is not presently using this route, it is proposed to report on dredging requirements to meet a 2m waterway specification. Breydon Water has regular transit of smaller in-shore commercial fishing, harbour pilot and windfarm support vessels drawing less than 2m. If a request was made to the Authority for passage of commercial freight vessels drawing more than 2m, then the

waterways specification and subsequent dredging requirements to facilitate that passage would be evaluated.

Revision of waterways specifications – above and below the water

- 2.5. As well as the depth of water, other dimensions of the physical space in which vessels operate need to be understood and defined. Together these features form the "navigable envelope" and include: width of river (bank to bank); height of water plants growing up from the bed; width of emergent and water plants growing at the river edges; and distance of tree growth out from the river edge and overhanging the water. Scaled diagrams showing the waterways specifications for the various river widths are shown in Appendix 3. Also shown are illustrative examples of waterways specification boundaries for various river edge features such as trees, water plants, 24 hour moorings and channel markers.
- 2.6. As these river channel features are largely driven by natural processes, a considerable variation in any one or all of these features may be observed across the navigation area at any one time. As such, the management required to maintain minimum standards will be rotational over different timescales. For examples, water plant cutting is focussed at high priority locations within the growing season each year (May-September), while priorities for riverside tree management are spread across a 5-year work programme.

Introducing internal carbon pricing

2.7. Carbon pricing is a financial tool that aids the shift towards a low-carbon economy by allowing the environmental and social costs of carbon emissions to be quantified. The responsibility of emissions is thus allocated back to the emitter instead of society at large and/or the environment, also known as the 'polluter pays principle'. Use of internal carbon pricing in the strategic planning and cost-benefit analyses for procurement options such as for fuel, heavy plant and vessels would allow the Authority to financially incentivise selection of low-carbon technologies that may be more expensive than traditional (fossil-fuelled) options. Current Authority procurement guidelines allow for a 10% surcharge for environmentally friendlier purchase options. This shadow price is proposed to be set to £50/tCO₂eq to align with net-zero targets and globally reported recommendations.

Table 1Diesel usage for operational vessels and equipment, financial year 2020/21

Cost of fuel (£)	Volume of fuel (litres)	CO2e emissions (tonnes)	Internal carbon cost (£)	Cost of fuel + internal carbon cost (£)
29,621	65,198	179.8	8,990	38,611

2.8. With a shadow carbon price of £50/tonne applied to the figures in Table 1, the carbon cost of diesel emissions from the Construction, Maintenance & Ecology section in

2020/21 alone would have been £8,990. Adding this internal carbon price to the cost of fuel leads to an approximately 30% increase in overall cost of diesel used in vessels and equipment. Therefore, if this internal carbon price is adopted, a sustainable measure to significantly reduce the carbon footprint, such as use of biofuels, would be financially justified if the biofuels cost was less than 30% more than the standard diesel.

3. Feedback

3.1. Feedback on the key areas in section 2 is welcomed, along with other general comments on the strategy and action plan. Responses can also be emailed to dan.hoare@broads-authority.gov.uk by the deadline of **Friday 17 September**.

Author: Dan Hoare

Date of report: 09 August 2021

Background papers: Draft Waterways Management Strategy and Action Plan 2022/23 to 2026/27 https://www.broads-authority.gov.uk/about-us/how-we-work/strategy/waterways-management-strategy

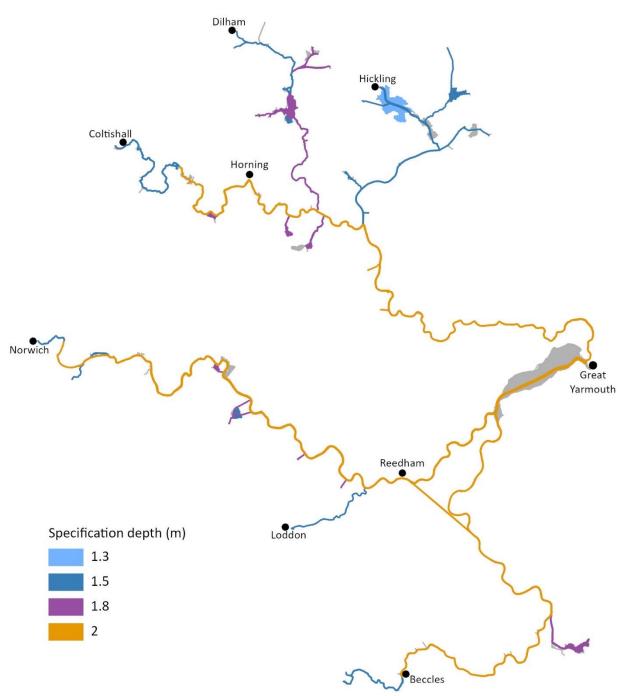
Broads Plan strategic actions: 2.1; 2.3; 3.1; 3.2; 4.2; 6.1

Appendix 1 – Map of waterways specification depths

Appendix 2 – Waterway specification for inside and outside of marked channels

Appendix 3 – Waterways specification diagrams

Appendix 1 – Map of waterways specification depths



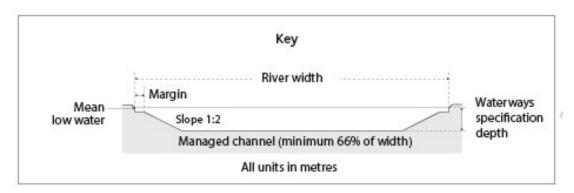
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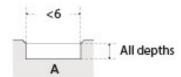
Appendix 2 – Waterway specification for inside and outside of marked channels

	Marked Channel - (m below MLW)	Outside of Channel - (m below MLW)	Hydrographic survey outside of marked channel	Revision of waterways specifications inside and outside marked channels
Barton Broad	1.8	1.5	17.8 ha = £1,220	Consistently apply the 1.5 m waterway specification outside the channel Report as two separate areas for dredge volumes. Carry out hydrographic survey at least every five years within marked channel and every ten years for outside
Hickling Broad	1.5	1.3	112.0 ha = £7,710	Retain existing waterways specifications. Report as two separate areas for dredge volumes. Carry out hydrographic survey at least every five years within marked channel and every ten years for outside.
Heigham Sound	1.5	No waterways specification set	23.1 ha = £1,590	Retain existing waterways specifications. Propose not to carry out a hydrographic survey outside the marked channel unless a specific project requires it in the future.
Martham North Broad	1.5	No waterways specification set	4.8 ha = £330	Retain existing waterways specifications. Propose not to carry out a hydrographic survey outside the marked channel unless a specific project requires it in the future.
Rockland Broad	1.8	1.5	13.1 ha = £900	Retain existing waterways specifications. Report as two separate areas for dredge volumes. Carry out hydrographic survey at least every five years within marked channel and every ten years for outside

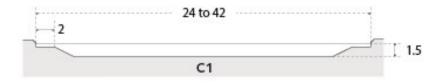
Bargate Broad	1.8	No waterways specification set	3.1 ha = £210	Retain existing waterways specifications. Marker buoys to be placed to indicate the line of the managed channel between the connecting dykes. Propose not to carry out a hydrographic survey outside the marked channel
Breydon Water	2.0	No waterways specification set	460 ha = £30,880	Retain existing waterways specifications. Work with partners to obtain access to existing hydrographic survey data from outside the marked channel.

Appendix 3 – Waterways specification diagrams





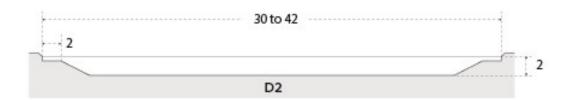




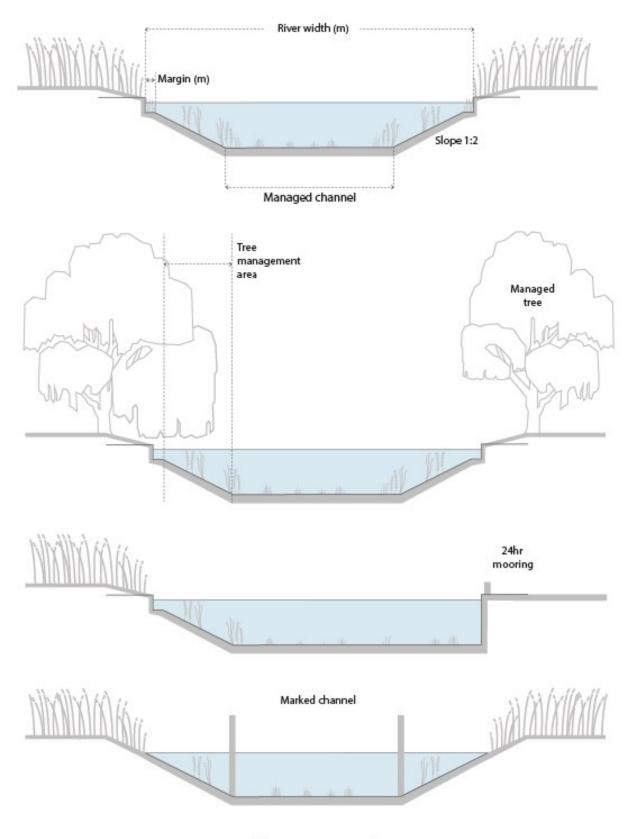
Diagrams A to E scaled relative to each other











Diagrams not to scale



02 September 2021 Agenda item number 9

Construction, Maintenance and Ecology work programme – progress update

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

Purpose

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

Broads Plan context

Construction, Maintenance and Ecology (CME) activities contribute to multiple objectives, in particular to Aspirations 3, 4 and 6 to manage sediment sustainably, maintain a safe open navigation, and maintain the access network and visitor facilities.

1. Maintaining water depths for navigation

- 1.1. The detailed breakdown in Appendix 1 gives the total volumes for the annual dredging programme for the whole of 2021/22 to the end of June 2021. A total of 7,940 m³ of dredged sediment was removed from the prioritised sites. This figure represents 34% of the programmed target of 23,490 m³ for this year.
- 1.2. In May, dredging started at Beccles and Oulton Broad respectively. As the dredging on the River Waveney started a month earlier than planned, this work will finish in August. The target sediment volume to be placed into the disposal location at Geldeston is set to be achieved. Dredging locations on the Waveney have included along the Beccles town reach, Geldeston Dyke and removal of shoals between Geldeston and Dunburgh. In Oulton Broad, the dredging has focussed on the approach towards Mutford Lock. Several weeks were delayed in July following mechanical issues with the concrete pump used to pump sediment over the floodbank at Peto's Marsh. Following the earlier than planned finish time for the River Waveney work, dredging in Oulton can now extend until late September to ensure target volumes are met. A revised Notice to Mariners will be issued for this extension of dredging.
- 1.3. August will see mobilisation to Hickling Broad for the final phase of the Chara Bay reedbed creation funded by the CANAPE project. Covering the geotextile tubes with

sediment and planting on top of the tubes will complete the design specification. Dredging in Heigham Sound is planned to provide the sediment to achieve this. Once dredging in Heigham Sound is completed, the team will move to the River Thurne, dredging upstream of Martham Ferry.

2. Maintaining safe public mooring facilities

- 2.1. Replacement of the capping and waling timbers at St Benet's 24 hour mooring and installation of a new 24 hour mooring pontoon at Peto's Marsh have been completed.
- 2.2. At Commissioners Cut, 24 hour mooring site investigations, new quay specifications and construction footprint requirements for a 12m wide dyke have been completed. Tendering and delivery of the construction work is intended for late autumn/early winter 2021.

3. Water plant management

- 3.1. Water plants are becoming more apparent in the Bure broads, notably this year in Wroxham Broad and Hoveton Little Broad. This is the positive and expected outcome of the water quality improvements across the whole of the Broads catchment that has been a focus of much research and investment by multiple stakeholders over the past 40 years.
- 3.2. With improved water quality and particularly increased clarity, increased water plant growth is one of the restoration targets now being achieved. The Authority has been reporting on the status of water plants in the Broads for many decades. This year's survey by the Ecology team is planned through July and August, with reporting by December. This information will be used to help us plan for the future.
- 3.3. The Authority's role in managing navigational access through plant cutting with the weed harvester vessels is focussed on the main rivers and marked channels through many broads such as Hickling, Rockland, Barton and Martham. We are now seeing the broads on the Bure and Yare 'catching up' with the Thurne broads, which have historically retained water plants communities and good water quality.
- 3.4. The Authority continues to inform waterways users of the presence of plants and their role in the ecology of the Broads, as highlighted in previous editions of the Broadsheet and Broadcaster publications. There is also lots of useful information on the Authority's website at https://www.broads-authority.gov.uk/looking-after/managing-land-and-water/water-plant-cutting.

4. Our resources

4.1. As part of the Government's Kickstarter scheme, which provides funding to employers to create jobs for 16 to 24-year-olds on Universal Credit, two work placements have been filled within the Construction, Maintenance & Ecology section (one with the

- Plant & Equipment Team, and one with the Ecology & Design Team). The placements run for a fixed term of six months.
- 4.2. Appendix 2 gives the planned proportion of Operations Technicians' time to be spent on the different navigation work types through 2021/22 and the progress reported up to the end of June 2021. One area already ahead of its scheduled allocation is the "other navigation works" category. This includes unplanned time spent raising sunken vessels, which has been a necessary but reactive activity. Two significant operations have been completed to remove such hazards to navigation at Beccles and Thorpe St Andrew. No riverside tree management was carried out by Operations Technicians in the period March to June, as this work can only be carried out in autumn and winter.

5. Other navigation works

5.1. The initial trial phase of the use of HVO fuel (Hydrotreated Vegetable Oil) as a direct, low carbon replacement for diesel in plant and vessel engines has been completed. No performance issues were detected with any of the engines using the fuel. The next steps are to confirm the future volumes required, policy compliance of future procurement and delivery logistics. A 90% reduction in carbon emissions is gained from operation of the plant and vessels running on this fuel.

Author: Dan Hoare, Sue Stephenson

Date of report: 10 August 2021

Broads Plan strategic actions: 2.1; 2.3; 3.1; 3.2; 4.2; 6.1

Appendix 1 – Annual dredging figures 2021-22

Appendix 2 – Percentage of operational staff time spent on navigation work types (2021-22)

to end June 2021

Appendix 1 – Annual dredging figures 2021-22

Project title	Active Broads Authority dredging weeks completed/ planned	Planned volume removed m ³	Actual volume removed m³	Planned annual project cost ¹	Actual project cost
River Waveney Beccles to Geldeston (June-Sept)	10/17	6,000	5,270	121,260	47,420
River Waveney Oulton Broad to Peto's Marsh (May-Aug)	6/13	6,000	2,670	119,230	59,720
River Thurne Martham to Somerton, sediment to Hickling (Sept-Jan)	0/13	3,490	0	85,480	490
River Chet Loddon to Hardley Flood bank (Nov-Feb)	0/15	8,000	0	112,360	700
Site Restoration Waveney - Beccles, Rockland Short Dyke, Bure - Six Mile House	-	-	-	19,340	2,810
Total	16/58	23,490	7,940	457,670	111,140

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

Appendix 2 – Percentage of operational staff time spent on navigation work types (2021-22) to end June 2021

Navigation work type	Staff days planned (2021-2022) Days	Staff days planned (2021-2022) % of total	Staff days worked (April 2021 to end June 2021) Days	Staff days worked (April 2021 to end June 2021) % of total
Dredging	1843	60.5	408	13.4
Mooring maintenance & repairs	626	20.6	93	3.0
Riverside tree management	180	5.9	0	0
Aquatic plant cutting	230	7.6	62	2.0
Other navigation works	165	5.4	107	3.5
Total in plan (2021/22)	3044		670	



02 September 2021 Agenda item number 10

Navigation income and expenditure 1 April to 30 June 2021 actual and 2021/22 forecast outturn

Report by Chief Financial Officer

Purpose

To present the actual Navigation income and expenditure for the three-month period to 30 June 2021, and provide a forecast of the projected expenditure at the end of the financial year (31 March 2022).

Contents

1.	Introduction	2
2.	Overview of actual income and expenditure	2
3.	Latest Available Budget	3
4.	Overview of forecast outturn 2021/22	3
5.	Reserves	4
6.	Conclusion	4
Appe	endix 1 – Navigation actual income and expenditure charts to 30 June 2021	6
Appe	endix 2 – Financial monitor: Navigation income and expenditure 2021/22	8

1. Introduction

1.1. This report gives a summary of the income and expenditure for the Navigation budget up until 30 June, 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

Table 1

Actual Navigation income and expenditure by Directorate to 30 June 2021

Directorate	Profiled Latest Available Budget £	Actual income and expenditure £	Actual variance £
Income	(2,732,458)	(2,904,766)	+ 172,308
Operations	923,187	832,072	+ 91,115
Strategic Services	82,439	81,250	+ 1,189
Chief Executive	232,246	206,693	+ 25,553
Projects, Corporate Items and Contributions from Earmarked Reserves	(102,658)	(40,386)	-62,272
Net (Surplus) / Deficit	(1,597,244)	(1,825,137)	+ 227,893

- 2.1. Core Navigation income is above the profiled budget at the end of month three. The overall position as at 30 June 2021 is a favourable variance of £227,893 or a 14.3% difference from the profiled LAB. This is principally due to:
 - An overall favourable variance of £173,497 within toll income:
 - Hire craft tolls is £136,090 above the profiled budget.
 - o Private craft tolls is £38,407 above the profiled budget.
 - An underspend within Operations relating to:
 - Equipment, Vehicle and Vessels is under the profiled budget by £38,002 due to delays in the equipment replacements.
 - Practical Maintenance is under the profiled budget by £20,658 due to delays in the St Benet's mooring refurbishment billing.
 - Ranger Services is under the profiled budget by £14,111 due to timing differences on the launch repairs and maintenance.

- An underspend within Chief Executive relating to a number of small variances across all budgets.
- An adverse variance within reserves relating to timing difference in equipment replacements from the Plant, Vessels and Equipment reserve.
- 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 2021/22. The LAB is based on the original budget for the year, with adjustments for known and approved budget changes such as carry-forwards and budget virements. Full details of movements from the original budget are in Appendix 2.

Table 2Adjustments to Navigation LAB

Item	Authorisation reference	Amount £
Original navigation budget 2020/21 (deficit)	Broads Authority 29/01/21 Agenda item number 8	221,915
Approved carry-forwards	Broads Authority 30/04/21 Agenda item number 9	77,972
Transfer from Finance to HR payroll budget	CEO approved 15/06/21	(421)
LAB as at 30 June 2021	n/a	299,466

3.2. The LAB therefore provides for a navigation deficit of £299,466 in 2021/22 as at 30 June 2021.

4. Overview of forecast outturn 2021/22

- 4.1. Budget holders have been asked to comment on the expected income and expenditure at the end of the financial year in respect of all budget lines for which they are responsible.
- 4.2. As at the end of June 2021, the forecast indicates there has been no change compared to the LAB:
 - The total forecast income is £3,503,650.
 - Total expenditure is forecast to be £3,803,116.
 - The resulting deficit for the year is forecast to be £299,466.

4.3. Initial indications show that toll income is performing above expectations. Management Team are looking at options where this additional income could be spent on and will report back to members in due course.

5. Reserves

Table 3Navigation Earmarked Reserves

Reserve name	Balance at 1 April 2021 £	In-year movements £	Current reserve balance £
Property	(397,658)	(25,629)	(423,287)
Plant, Vessels and Equipment	(259,014)	(86,599)	(345,613)
Premises	(89,781)	(35,686)	(125,467)
CANAPE	(195,661)	103,197	(92,464)
Computer Software	(10,232)	(3,300)	(13,532)
Total	(952,346)	(48,017)	(1,000,363)

- 5.1. As in previous years, the Authority's contributions to the reserves have all been made in full at the end of quarter one. This has resulted in the reserves showing increased balances at the end of June. This will reduce as planned purchases take place throughout the year.
- 5.2. The CANAPE reserve contains the expenditure relating to claims five and six. Reimbursement for claim five is expected to be received shortly.

6. Conclusion

- 6.1. The forecast outturn position for the year suggests a deficit within the Navigation budget, which would be balanced through the use of reserves. This would result in a Navigation Reserve balance of approximately £614,000 at the end of 2021/22 (before any year-end adjustments). This would mean the Navigation Reserve would be above the recommended 10% at 16.1%. Year-end transfers of interest to the earmarked reserves mean it will remain the same due to the very low rates of interest. This will be highly dependent on the level of interest received.
- 6.2. It is important to remember the Navigation reserve is showing a higher balance due to the transfer between National Park and Navigation to fund the cost of the safety package in 2021/22 and 2022/23. If the 2022/23 cost is deducted from the closing balance for 2021/22 then the reserve level would be 12.9%, just above the 10% minimum.

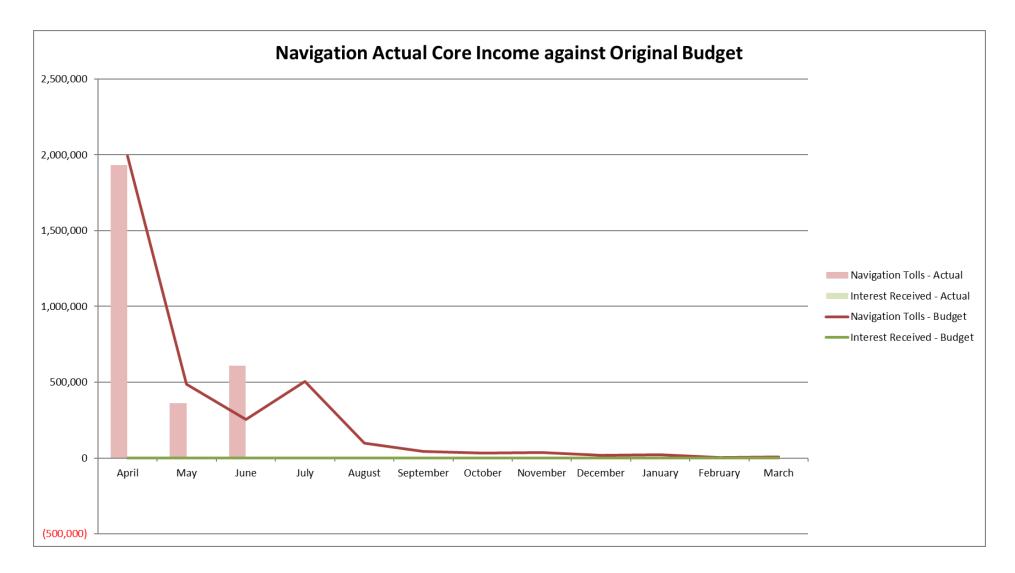
Author: Emma Krelle

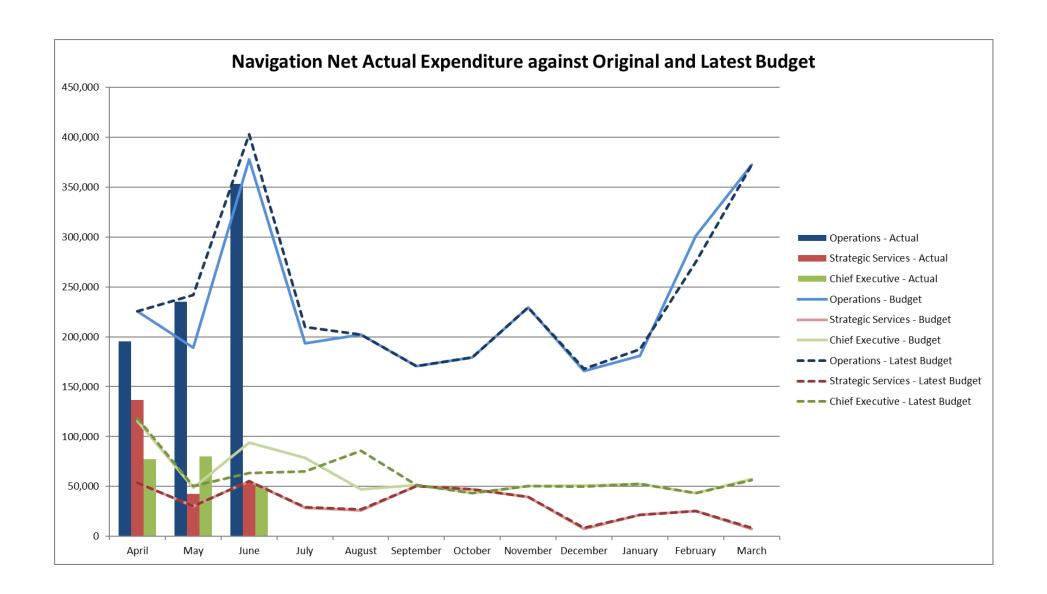
Date of report: 16 August 2021

Appendix 1 – Navigation actual income and expenditure charts to 30 June 2021

Appendix 2 – Financial monitor: Navigation income and expenditure 2021/22

Appendix 1 – Navigation actual income and expenditure charts to 30 June 2021





Appendix 2 – Financial monitor: Navigation income and expenditure 2021/22 Table 1

Income

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Total Income	(3,503,650)	0	(3,503,650)	(3,503,650)	+ 0
National Park Grant	0	0	0	0	+ 0
Income	0	0	0	0	+ 0
Hire Craft Tolls	(1,131,000)	0	(1,131,000)	(1,131,000)	+ 0
Income	(1,131,000)	0	(1,131,000)	(1,131,000)	+ 0
Private Craft Tolls	(2,303,000)	0	(2,303,000)	(2,303,000)	+ 0
Income	(2,303,000)	0	(2,303,000)	(2,303,000)	+ 0
Short Visit Tolls	(45,000)	0	(45,000)	(45,000)	+ 0
Income	(45,000)	0	(45,000)	(45,000)	+ 0
Other Toll Income	(17,900)	0	(17,900)	(17,900)	+ 0
Income	(17,900)	0	(17,900)	(17,900)	+ 0
Interest	(6,750)	0	(6,750)	(6,750)	+ 0
Income	(6,750)	0	(6,750)	(6,750)	+ 0

Table 2Operations

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Total Operations	2,900,656	77,500	2,978,156	2,869,081	+ 109,075
Construction and Maintenance Salaries	834,956	0	834,956	834,956	+ 0
Salaries	834,956	0	834,956	834,956	+ 0
Expenditure	0	0	0	0	+ 0
Equipment, Vehicles & Vessels	369,880	0	369,880	369,880	+ 0
Income	(6,090)	0	(6,090)	(6,090)	+ 0
Expenditure	375,970	0	375,970	375,970	+ 0
Water Management	95,135	0	95,135	95,135	+ 0
Expenditure	95,135	0	95,135	95,135	+ 0
Land Management	0	0	0	0	+ 0
Income	0	0	0	0	+ 0
Expenditure	0	0	0	0	+ 0
Practical Maintenance	394,836	77,500	472,336	472,336	+ 0
Income	(11,000)	0	(11,000)	(11,000)	+ 0
Expenditure	405,836	77,500	483,336	483,336	+ 0
Waterways and Recreation Strategy	28,290	0	28,290	28,290	+ 0

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Income	0	0	0	0	+ 0
Salaries	19,290	0	19,290	19,290	+ 0
Expenditure	9,000	0	9,000	9,000	+ 0
Project Funding	1,089	0	1,089	1,089	+ 0
Expenditure	0	0	0	0	+ 0
Pension Payments	1,089	0	1,089	1,089	+ 0
Ranger Services	837,448	0	837,448	737,448	+ 100,000
Income	(7,000)	0	(7,000)	(7,000)	+ 0
Salaries	588,028	0	588,028	588,028	+ 0
Expenditure	256,245	0	256,245	156,245	+ 100,000
Pension Payments	175	0	175	175	+ 0
Safety	92,113	0	92,113	83,038	+ 9,075
Income	(1,000)	0	(1,000)	(1,000)	+ 0
Salaries	43,735	0	43,735	43,735	+ 0
Expenditure	49,378	0	49,378	40,303	+ 9,075
Premises	126,462	0	126,462	126,462	+ 0
Income	(2,450)	0	(2,450)	(2,450)	+ 0
Expenditure	128,912	0	128,912	128,912	+ 0

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Expenditure	50,000	0	50,000	50,000	0
Pension Payments	12,100	0	12,100	12,100	0
Operations Management and Administration	137,490	0	137,490	137,490	0
Salaries	128,990	0	128,990	128,990	0
Expenditure	8,500	0	8,500	8,500	0
Premises - Head Office	75,075	0	75,075	75,075	+ 0
Expenditure	75,075	0	75,075	75,075	+ 0

Table 3Strategic Services

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Total Strategic Services	304,821	3,342	308,162	308,162	+ 0
Development Management	4,361	0	4,361	4,361	+ 0
Income	0	0	0	0	+ 0
Salaries	4,361	0	4,361	4,361	+ 0
Expenditure	0	0	0	0	+ 0
Pension Payments	0	0	0	0	+ 0
Strategy and Projects Salaries	8,845	0	8,845	8,845	+ 0
Income	0	0	0	0	+ 0
Salaries	8,800	0	8,800	8,800	+ 0
Expenditure	45	0	45	45	+ 0
Biodiversity Strategy	0	0	0	0	+ 0
Income	0	0	0	0	+ 0
Expenditure	0	0	0	0	+ 0
Human Resources	57,283	3,342	60,624	60,624	+ 0
Salaries	33,185	0	33,185	33,185	+ 0
Expenditure	24,097	3,342	27,439	27,439	+ 0

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Volunteers	29,676	0	29,676	29,676	+ 0
Salaries	20,428	0	20,428	20,428	+ 0
Expenditure	9,248	0	9,248	9,248	+ 0
Communications	80,430	0	80,430	80,430	+ 0
Income	0	0	0	0	+ 0
Salaries	70,455	0	70,455	70,455	+ 0
Expenditure	9,975	0	9,975	9,975	+ 0
Visitor Centres and Yacht Stations	90,263	0	90,263	90,263	+ 0
Income	(69,450)	0	(69,450)	(69,450)	+ 0
Salaries	134,025	0	134,025	134,025	+ 0
Expenditure	25,688	0	25,688	25,688	+ 0
Strategic Services Management and Administration	33,963	0	33,963	33,963	+ 0
Salaries	32,958	0	32,958	32,958	Salaries
Expenditure	1,005	0	1,005	1,005	Expenditure

Table 4Chief Executive

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Total Chief Executive	733,553	(3,290)	730,263	730,263	+ 0
Legal	32,500	0	32,500	32,500	+ 0
Income	(2,500)	0	(2,500)	(2,500)	+ 0
Expenditure	35,000	0	35,000	35,000	+ 0
Governance	95,405	0	95,405	95,405	+ 0
Salaries	56,021	0	56,021	56,021	+ 0
Expenditure	39,384	0	39,384	39,384	+ 0
Chief Executive	48,705	0	48,705	48,705	+ 0
Salaries	47,773	0	47,773	47,773	+ 0
Expenditure	932	0	932	932	+ 0
Asset Management	81,302	0	81,302	81,302	+ 0
Income	(2,000)	0	(2,000)	(2,000)	+ 0
Salaries	21,020	0	21,020	21,020	+ 0
Expenditure	62,283	0	62,283	62,283	+ 0
Finance and Insurance	191,521	(3,290)	188,231	188,231	+ 0
Salaries	85,230	0	85,230	85,230	+ 0

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Expenditure	106,291	(3,290)	103,001	103,001	+ 0
Collection of Tolls	152,530	0	152,530	152,530	+ 0
Salaries	141,330	0	141,330	141,330	+ 0
Expenditure	11,200	0	11,200	11,200	+ 0
ICT	131,591	0	131,591	131,591	+ 0
Salaries	66,482	0	66,482	66,482	+ 0
Expenditure	65,109	0	65,109	65,109	+ 0

Table 5Projects and Corporate items

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Total Projects and Corporate Items	27,277	0	27,277	27,277	+ 0
Partnerships / HLF	(23,684)	0	(23,684)	(23,684)	+ 0
Income	(64,524)	0	(64,524)	(64,524)	+ 0
Salaries	14,540	0	14,540	14,540	+ 0
Expenditure	26,300	0	26,300	26,300	+ 0
Corporate Items	50,960	0	50,960	50,960	+ 0
Expenditure	1,760	0	1,760	1,760	+ 0
Pension Payments	49,200	0	49,200	49,200	+ 0

Table 6Contributions from earmarked reserves

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Total contributions from Earmarked Reserves	(240,742)	0	(240,742)	(131,667)	- 109,075
Earmarked Reserves	(240,742)	0	(240,742)	(131,667)	- 109,075

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Expenditure	(240,742)	0	(240,742)	(131,667)	- 109,075

Table 7Net (Surplus) / Deficit

Row Labels	Original budget (Navigation) £	Budget adjustments (Navigation) £	Latest Available Budget (Navigation) £	Forecast outturn (Navigation) £	Forecast outturn variance (Navigation) £
Grand Total	221,915	77,552	299,466	299,466	+ 0