

Navigation Committee

12 January 2023

Agenda item number 11

Construction, Maintenance and Ecology work programme progress update

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

Purpose

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

Broads Plan context

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

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

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

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

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1. Maintaining water depths for navigation

1.1. The detailed breakdown in Appendix 1 gives progress and volumes for the dredging programme for 2022/23 to the end of August (April to end November 2022). A total of

24,020 m³ of dredged sediment was removed from the prioritised sites. This figure represents 81% of the programmed target of 29,750 m³ for the year.

- 1.2. Since the previous report to Navigation Committee, dredging in Malthouse Broad has started and has been progressing well. There is sufficient capacity in the flood bank setback areas at Horning Hall to take all of the sediment volume above Waterways Specification level from the broad. Dredging in the broad is planned to be completed by the end of February, with some minor shoal removal in the River Bure, if time allows. Notice to Mariners is here [NTM 07 of 2022 - Dredging at Sutton Broad \(broads-authority.gov.uk\)](#)
- 1.3. This year's campaign of dredging at Oulton Broad is progressing well, with continuation through to the end of August 2023. The focus of dredging in November and December this year has been in the area of North Bay, which is actually at the western end of the broad. At the sediment re-use site, the one-hectare area of Peto's Marsh will be filled to the level of the reed rond. The earth embankment that contains the dredged sediment is also now virtually completed. A topographic survey showed that additional material will be needed to achieve the final design height and flood bank specification, which shall be completed once the dredging ends in September 2023. Notice to Mariners is here [NTM 09 of 2022 – Dredging works at Oulton Broad \(broads-authority.gov.uk\)](#).

2. Maintaining safe public mooring facilities

- 2.1. The open tender for a piling contractor at Neatishead 24-hour mooring has been successful. The tender is now in the standstill period prior to a contract being agreed. Work is due to start in February 2023 and shall see the closure of the 24-hour mooring.
- 2.2. Timber refurbishment of the Boundary Farm 24-hour mooring was also completed this autumn. This included the replacement of the capping and waling, as well as some of the more structural horizontal 'barge boards'. The piling at this mooring is comprised of vertical steel 'king piles' with horizontal timber beams, or 'barge boards' placed between. There are some benefits from this design, originally installed at some point in the 1960s, but it does mean that significant stripping back and excavation on the landward side is required to affect any repairs.

3. Our resources

- 3.1. During December all of the supervisors based at the Dockyard have been actively gaining quotes and ordering items listed for purchase from the additional Defra grant for capital items, as outlined in the report to the Broads Authority [Capital Funding from DEFRA](#).

4. Water plant management

- 4.1. A total of 298 staff days was spent on water plant management from the navigation in the 2022 season. This is the most time the Authority has ever spent on this type of task, which highlights how the visible improvements in water clarity has resulted in increased water plant growth. A more complete breakdown of how the balance of staff time spent across all the operational activities will be reported at the end of the financial year, in March 2023. The capital funding includes provision for the purchase of an additional water plant cutting machine.

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Background papers:

[Broads Plan](#) strategic actions: C1, C2, C3, C4

Appendix 1 – Dredging figures 2022-23 (April 2021 to end November 2022)

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Project title Dredge site and sediment re-use location	Active Broads Authority dredging weeks completed/ planned	Planned volume removed m³	Actual volume removed m³	Planned annual project cost ¹	Actual project cost
River Ant Sutton Broad to u/s Hunsett Mill (May-Jul)	9/20	12,000	6,200	120,090	68,790
<i>COMPLETE – delayed start owing to consenting issues; early completion in order to install marker posts in Barton Broad</i>					
River Waveney Oulton Broad to Peto’s Marsh (May - Mar)	23/21	10,000	12,540	50,780	114,990
<i>ONGOING – delays owing to pump breakdowns; extended to end March 2023; revised planned volume of 17,500m³;</i>					
River Bure Malthouse Broad to Ant mouth setbacks (Oct-Feb)	6/9	6,750	4,970	98,390	23,710
<i>ONGOING – Replacement project for Upper Bure (Belaugh to Wroxham)</i>					
River Bure Plough dredging Lower Bure (Mar)	Contractor	1,000	0	5,000	0
<i>Due for contractor March 2023</i>					
River Yare	2/0	0	310		
<i>COMPLETE - Opportunistic removal of sediment from the bar at the entrance to Hardley Dyke and Haddiscoe Cut</i>					

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.

Project title Dredge site and sediment re-use location	Active Broads Authority dredging weeks completed/ planned	Planned volume removed m³	Actual volume removed m³	Planned annual project cost ¹	Actual project cost
Site Restoration Beccles, Raveningham, Hardley Flood	-	-	-	13,020	17,810
Future site preparation Survey, mitigation & set-up	-	-	-	9,960	7,060
Dredging support activities Maintenance of ancillary dredging kit, etc	-	-	-	-	27,300
Total	40/50	29,750	24,020	297,240	259,660