

# Navigation Committee

04 September 2025

Agenda item number 9

## Construction Maintenance and Ecology work programme update

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

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### Purpose

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

### Broads Plan context

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

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

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

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

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## 1. Introduction

- 1.1. The detailed breakdown in Appendix 1 gives the figures and volumes for the current dredging programme for 2025/26 (April 2025 to end July 2025). A total of 6,390 m<sup>3</sup> of dredged sediment has been removed from the prioritised sites. This figure represents 23% of the programmed target of 27,380 m<sup>3</sup> for the year.
- 1.2. Dredging work completed so far in 2025/26 includes the marked channel in Rockland Broad; removal of a bar at the mouth of Hardley Dyke; the up and downstream dykes connecting Bargate Broad to the main river, and within the nominal channel between the two dykes across the southern edge of Bargate Broad. Prior to the first water plant cut of the year at Bargate, yellow buoys will be placed to mark the maintained channel. Appendix 2 shows that the duration of work completed to date this year broadly fits within expectations for this point in the year. The allocation labelled as Corporate is the one area with greater actual time dedicated to it in the first four months of the year. This is largely down to some long-term sickness and the two operations technician posts being deleted as part of this year's staffing restructure in response to reduced National Park Grant funding from Defra.
- 1.3. Another project, finished by the end of July 2025, involved dredging the River Yare between Postwick Viaduct and Thorpe Rail Bridge. The dredged material was placed in lagoons to dry and will later be used by the Environment Agency to strengthen sections of the floodbank around Postwick Marshes.
- 1.4. In another collaborative project for the Environment Agency, the Authority's staff and equipment were contracted via a Public Sector Co-operation Agreement, alongside a team from the Water Management Alliance (Broads IDB team). The project was to excavate dry dredging spoil from the Authority's land at Geldeston on the River Waveney and re-use it for floodbank maintenance. Wherries transported the material down river to be incorporated into low points where the floodbank had settled. The bank crest height has now been raised to the Agency's design standards, which will prevent water over-topping into the drained marshland behind the bank. This work has also helped to prevent deterioration of a riverside public right of way. The Authority's land has been restored to marsh level and can be used in the future to receive more dredged sediment, as and when required.
- 1.5. Appendices 3 and 4 give the final year end summary for all Navigation work for 2024/25 and the final figures and volumes for last year's dredging programme for 2024/25 (April 2024 to end March 2025). A total of 23,800 m<sup>3</sup> of dredged sediment was removed from the prioritised sites. This figure represents 65% of the programmed target of 36,360 m<sup>3</sup> for the year. The key reasons for the actual dredge volume and total cost being less than

predicted was due to sections of work being removed in-year from the active programme (including Bridge Broad from the River Bure and Catfield Dyke from the Upper Thurne), less staff time was therefore spent on dredge projects and in some areas, less sediment dredged than predicted. The overall allocation of operational staff time on priority Navigation activities was maintained at 60%, with National Park activities at 40%. Within the Navigation allocation, a greater than planned amount of time was spent on “other navigation works” which included activities like removal and disposal of wrecked/abandoned vessels and the change to in-house delivery of the Breydon marker post installation.

## 2. Maintaining safe public mooring facilities

- 2.1. Since the start of the season, the Authority has renegotiated the lease and opened the previous 24 hour mooring site at Aldeby on the River Waveney. Lease negotiations were less favourable at Rockland Staithe with annual rates and terms being outside the parameters agreed by the Navigation Committee. This site is no longer managed by the Authority and we have removed all Authority signage and the two electric charge points. The landowners have taken back the management of the moorings.
- 2.2. The new scrollable and zoomable webmap of all the Authority’s 24 hour, emergency, layby and demasting moorings has been produced and is available here <https://www.broads-authority.gov.uk/boating/facilities/moorings>. Users of the website can now filter based on criteria such as electric charging points, water, whether charges are applicable etc. and can view the moorings in both map and list format.
- 2.3. For the more detailed reports on the minor mooring maintenance work completed, these are included in the Chief Executive’s regular public [Broads Briefings](#).

## 3. Water Plant Management

- 3.1. The first two cuts of the year has already been carried out across the Upper Thurne at Somerton Dyke and Hickling Broad. The growth of water plants early in the season is promoted by factors such as water quality influencing the clarity of water (e.g. phosphate and nitrate pollution stimulating microscopic algae) and the weather conditions (sunshine and favourable temperatures).
- 3.2. Overall, this past winter has been mild. Met Office data for Coltishall shows only three dates from October 2024 to March 2025 when minimum air temperature dropped below 0°C. The winter of 2024/25 in northeast Norfolk, UK, was notably milder compared to historical averages, aligning with broader regional and national trends. East Anglia experienced its warmest February on record, with a mean temperature of 8.2°C, surpassing the previous record of 7.6°C set in 1990 (see background papers for link).
- 3.3. Based on the mild winter in 2024/25 and the sunny and warm spring 2025, water plant growth is expected to be at or above predicted levels, if other factors such as water

quality are favourable. The amount of water plant growth and the time taken to manage it will be reviewed at the end of the growth season.

- 3.4. As reported at the last Navigation Committee and include in Appendix 2, 225 workdays have been allocated for Operations Technicians to carry out water plant management in 2025. Rangers continue to feedback on priority areas and when water plant growth is causing issues for navigation. Appendix 2 will be updated at each Navigation Committee, to report the actual days spent on the various waterways management activities, including water plant management.

## 4. Channel markers

- 4.1. The planned removal of the timbers at Turntide Jetty has had to be postponed until September due to a mechanical issue and delays in obtaining the parts for our largest tug, which has meant the initially planned time window has been missed. Regular checks on the structure will be carried out over the summer to ensure any safety issues that may arise are identified and managed accordingly. All current channel markers in place around Turntide Jetty shall remain unaltered until works have been completed.

## 5. Our resources

- 5.1. Capital items procured as part of the Defra additional grant in 2024/25 will be used to support our on-going waterways management activities. The most significant, is a new Schwing Stetter SP2800 concrete pump. This replaces our previous Putzmeister pump, but with greater engine capacity, for smoother and effective running, and improved features for easier routine maintenance. The Schwing pump will be used to move dredged sediment from the riverside to locations up to 200 m from the water's edge, allowing a range of sediment re-use options to be realised.

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Date of report: 20 August 2025

Background papers: [Met Office seasonal assessment Winter 2025](#)

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

Appendix 1 – Annual dredging progress 2025/26 (to end July 2025)

Appendix 2 - Operational staff time spent on all work types 2025/26 (to end July 2025)

Appendix 3 – Final annual dredging figures 2024/25 (to end March 2025)

Appendix 4 - Final operational staff time spent on all work types 2024/25 (to end March 2025)

## Appendix 1– Annual dredging progress 2025/26 (to end July 2025)

<b>Project title Dredge site and sediment re-use location</b>	<b>Active Broads Authority dredging weeks completed/ planned</b>	<b>Planned volume removed m<sup>3</sup></b>	<b>Actual volume removed m<sup>3</sup></b>	<b>Planned annual project cost<sup>1</sup></b>	<b>Actual project cost</b>
<b>River Yare</b> Bargate Broad	8/8	2,400	1,800	£56,260	£54,730
<i>Postwick Marshes re-use site – started in 2024/25, completed in 2025/26</i>					
<b>River Yare</b> Postwick Viaduct to Trowse Swing Bridge	9/9	6,480	4,230	£74,880	£55,160
<i>Postwick Marshes re-use site - complete</i>					
<b>River Yare</b> Hardley Dyke	-	-	170	-	-
<b>River Thurne</b>					
Hickling channel	0/8	6,000	0	£175,420	£880
Martham & Somerton Boat Dykes	0/4	1,300	0		
Somerton to Candle Dyke	0/10	6,200	0		
<i>Hickling channel (Chara Bay re-use site) – October to November Martham &amp; Somerton Boat Dykes (sidecast) – November Somerton to Candle Dyke (Chara Bay re-use site) – December to February</i>					
<b>River Bure</b> Wroxham Broad	0/5	3,000	0	£33,940	£1,900
<i>Wroxham Island – February to March</i>					
<b>River Bure</b> Lower reaches	0/4	5,000	0	£35,270	£200
<i>Cutter suction head dredging on ebb tide – January to February</i>					
<b>River Bure</b> Mid-Bure	-	-	-	£3,000	0
<i>Lagoon preparation costs</i>					
<b>Site restoration</b>	-	-	-	-	£5,200

<b>Project title Dredge site and sediment re-use location</b>	<b>Active Broads Authority dredging weeks completed/ planned</b>	<b>Planned volume removed m<sup>3</sup></b>	<b>Actual volume removed m<sup>3</sup></b>	<b>Planned annual project cost<sup>1</sup></b>	<b>Actual project cost</b>
<b>Future site preparation Survey, mitigation &amp; set- up</b>	-	-	-	-	£1,840
<b>Dredging support activities</b>	-	-	-	-	£9,280
<b>Total</b>	<b>20/45</b>	<b>27,380</b>	<b>6,200</b>	<b>£378,770</b>	<b>£121,190</b>

## Appendix 2 – Operational staff time spent on all work types 2025/26 (update to end July 2025)

<b>Work type</b>	<b>Planned - Days</b>	<b>Planned - % of annual total days</b>	<b>Actual - Days</b>	<b>Actual - % completed</b>
<b>Navigation (60%)</b>	<b>2,664</b>	<b>60</b>	<b>1,059</b>	<b>24</b>
<i>Italics are proportion within Navigation</i>				
<i>Dredging</i>	<i>1068</i>	<i>40</i>	<i>413</i>	<i>16</i>
<i>Mooring maintenance &amp; repairs</i>	<i>687</i>	<i>26</i>	<i>188</i>	<i>7</i>
<i>Riverside tree management</i>	<i>50</i>	<i>2</i>	<i>7</i>	<i>-</i>
<i>Water plant cutting</i>	<i>225</i>	<i>8</i>	<i>122</i>	<i>46</i>
<i>Other navigation works<sup>1</sup></i>	<i>184</i>	<i>7</i>	<i>95</i>	<i>4</i>
<i>Corporate allocation <sup>2</sup></i>	<i>450</i>	<i>17</i>	<i>234</i>	<i>9</i>
<b>Recreation (10%)<sup>3</sup></b>	<b>444</b>	<b>10</b>	<b>126</b>	<b>3</b>
<b>Conservation (30%)<sup>4</sup></b>	<b>1,332</b>	<b>30</b>	<b>284</b>	<b>6</b>
<b>Total</b>	<b>4,440</b>	<b>100</b>	<b>1,469</b>	<b>33</b>

1 – includes raising & disposal of wrecks, channel markers & buoys, gaugeboards & signage

2 – includes premises & equipment maintenance, training, sickness & gaps in recruitment.

3 - National Park funded work to facilitate public access and visitor services.

4 – National Park funded work to carry out priority fen management and other biodiversity restoration projects

## Appendix 3 – Final annual dredging figures 2024/25 (to end March 2025)

<b>Project title Dredge site and sediment re-use location</b>	<b>Active Broads Authority dredging weeks completed/ planned</b>	<b>Planned volume removed m<sup>3</sup></b>	<b>Actual volume removed m<sup>3</sup></b>	<b>Planned annual project cost<sup>1</sup></b>	<b>Actual project cost</b>
<b>River Bure</b> (continuation from 2023/24) Juby's Farm to Hoveton Viaduct	28/27	17,900	12,810	£190,710	£198,870
<i>Lagoon re-use site NB: Planned volume includes Bridge Broad (2,870m<sup>3</sup>) which was removed from the work programme</i>					
<b>River Yare</b> Rockland Broad (channels & dykes)	17/26	13,500	10,380	£190,020	£101,490
<i>Rockland Short Dyke &amp; Postwick Marshes re-use sites &amp; Postwick Tip. Running December to March</i>					
<b>River Ant</b> Stalham Dyke	1/3	830	250	£37,140	£11,360
<i>Hunsett Mill re-use site; work completed December 2024</i>					
<b>River Yare</b> Bargate Broad	3/4	2,400	360	£45,150	£2,820
<i>Postwick Marshes re-use &amp; Postwick Tip. Running in February 2025 concurrently with Rockland dredging</i>					
<b>River Thurne</b> Catfield Dyke	0/4	2,000	0	£27,350	£1,030
<i>Deferred to 2025/26 due to delays in completing the Upper Bure project</i>					
<b>Site restoration</b>	-	-	-	-	£3,750
<b>Future site preparation</b> Survey, mitigation & set-up	-	-	-	-	£3,300
<b>Dredging support activities</b>	-	-	-	-	£5,500
<b>Total</b>	<b>46/64</b>	<b>36,630</b>	<b>23,800</b>	<b>490,370</b>	<b>328,120</b>

Appendix 4 – Final operational staff time spent on all work types 2024/25 (to end March 2025).

<b>Work type</b>	<b>Planned - Days</b>	<b>Planned - % of annual total</b>	<b>Actual - Days</b>	<b>Actual - % of completed</b>
<b>Navigation (70%)</b>	<b>3,372</b>	<b>70</b>	<b>3,349</b>	<b>70</b>
<i>Italics are proportion within Navigation</i>				
<i>Dredging</i>	<i>1709</i>	<i>51</i>	<i>1379</i>	<i>41</i>
<i>Mooring maintenance &amp; repairs</i>	<i>601</i>	<i>18</i>	<i>552</i>	<i>16</i>
<i>Riverside tree management</i>	<i>43</i>	<i>1</i>	<i>78</i>	<i>2</i>
<i>Water plant cutting</i>	<i>266</i>	<i>8</i>	<i>227</i>	<i>7</i>
<i>Other navigation works</i> <sup>1</sup>	<i>228</i>	<i>7</i>	<i>354</i>	<i>11</i>
<i>Corporate allocation</i> <sup>2</sup>	<i>525</i>	<i>15</i>	<i>759</i>	<i>23</i>
<b>Recreation (10%)</b> <sup>3</sup>	<b>482</b>	<b>10</b>	<b>438</b>	<b>9</b>
<b>Conservation (20%)</b> <sup>4</sup>	<b>963</b>	<b>20</b>	<b>1,015</b>	<b>21</b>
<b>Total</b>	<b>4,817</b>	<b>100</b>	<b>4,802</b>	<b>100</b>

1 – includes raising & disposal of wrecks, channel markers & buoys, gaugeboards & signage

2 – includes premises & equipment maintenance, training, sickness & gaps in recruitment.

3 - National Park funded work to facilitate public access and visitor services.

4 – National Park funded work to carry out priority fen management and other biodiversity restoration projects