

# Navigation Committee

16 January 2020

Agenda item number 11

## Construction Maintenance and Environment work programme – progress update

Report by Head of Construction, Maintenance and Environment

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### Purpose

To update members 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.

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## 1. Maintaining water depths for navigation

- 1.1. The detailed breakdown in Appendix 1 gives the volumes for the annual dredging programme to the end of November 2019. A total of 23,130 m<sup>3</sup> of dredged sediment has been removed from the prioritised sites. This figure represents 53% of the programmed target of 44,000 m<sup>3</sup> for 2019/20.
- 1.2. Dredging started once again in Hickling Broad for Phase 2 of the EU Interreg funded CANAPE project, with the restoration of the reedbed at Chara Bay. This winter will see roughly half of the lagoon area filled with sediment and reeds planted along the top of the geotextile bags. Dredging through the marked channel of Hickling Broad has been completed, and dredging has moved to Heigham Sound and Deep Dyke. In January,

Catfield Dyke will also be dredged using the Authority's mud pump. A full closure of Catfield Dyke is required for this task, as advised in the recent [Notice to Mariners](#).

- 1.3. Other dredging work this winter includes work at Tyler's Cut, which at the time of writing has been completed. Remaining work over winter 2019/20 includes returning to [South Walsham](#) earlier than originally planned, to carry on with dredging from the Fleet Dyke into priority areas within the outer broad. A return was planned in March 2020, but this can now be brought forward by at least two months. Prioritisation of this work is two-fold, in that the dredging is required to meet Waterways Specifications and the setback area where the sediment is being placed is required by BESL/EA for future floodbank work near the mouth of the River Ant.

## 2. Maintaining safe public mooring facilities

- 2.1. A tender process has been opened to re-pile a 110-metre length of Acle Bridge 24-hour moorings. This work is aimed to start early next year with completion due in the spring.
- 2.2. Refurbishment of the capping and waling timbers at Neatishead turning basin and Paddy's Lane 24-hour mooring will be carried out this winter by contractors. At South Walsham slipway and Irstead Staithe 24-hour mooring, minor repairs to furniture and fittings have been completed.
- 2.3. Following tree inspections by staff, the appointment of tree surgery contractors has been arranged for hazard removal at Paddy's Lane, Horning Marshes and Wayford Bridge moorings.

## 3. Our resources

- 3.1. This year's three apprentices have completed all the planned training as part of their Practical Environmental and Conservation Apprenticeship, which we run in partnership with Easton & Otley College. All three are now working day-to-day with Operations Technicians on all tasks across the work programme.
- 3.2. Programmed vessel refits this winter include the workboat Didler, the Authority's mud pump, two ranger launches and the two weed harvesters. In addition, the Plant and Equipment team have been fitting several new engines to vessels. These include a hydraulic engine for the welfare vessel, a new diesel engine for the ranger launches Spirit of Breydon and ML Yare.

## 4. Managing riverside trees

- 4.1. Planned tree management at prioritised locations on the [River Ant](#) has been completed.
- 4.2. Planned [tree management at prioritised locations](#) on the River Ant and Bure has started by staff and volunteers. The tree shears are to be used on a number of stretches of the River Yare between Bramerton and Brundall this winter, removing overhanging growth

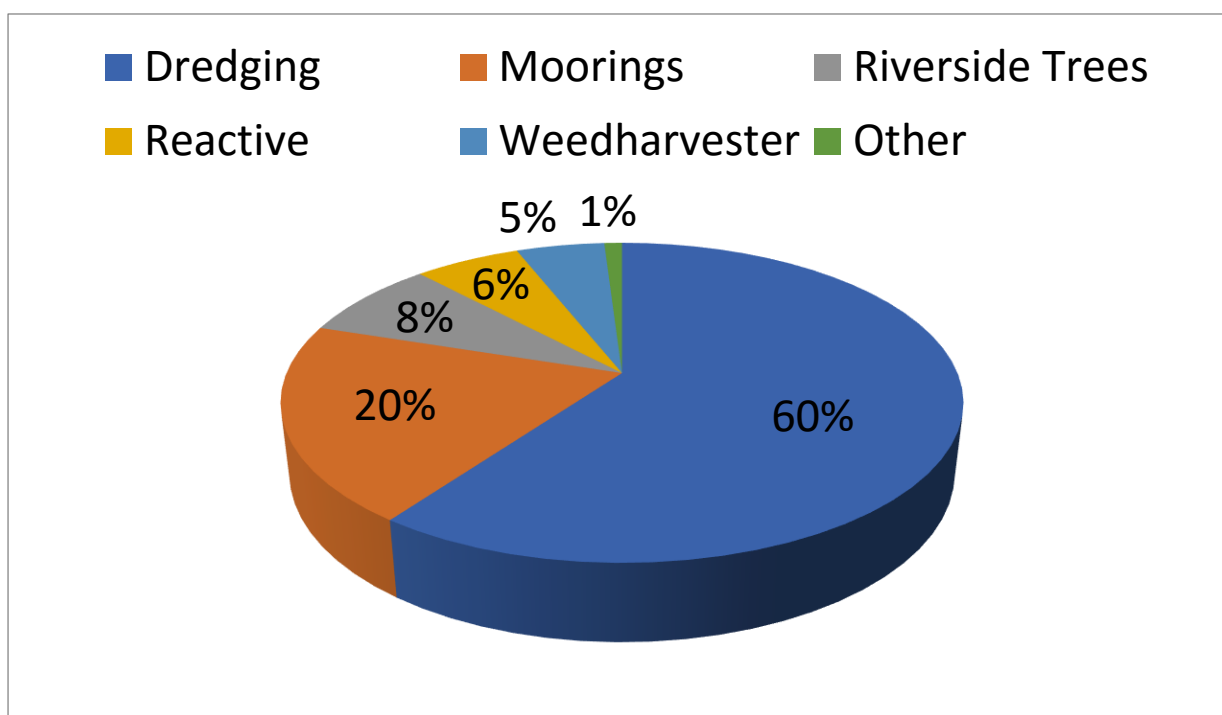
and tree removal. On the River Waveney, contractors are lined up for two stretches upstream of Beccles.

## 5. Other navigation works

- 5.1. The overall allocation of the Construction and Maintenance teams' time on navigation tasks is divided between five main categories. In ranked order of total person days allocated for 2019/20, the categories are dredging, 24-hour mooring maintenance, riverside tree management, reactive repairs & maintenance, and water plant management. Figure 1 shows the proportions of these allocations. The time spent on navigation tasks is 70% of the total available time for the Construction and Maintenance teams. The other 30% is divided between 20% for conservation tasks (fen management, lake restoration, invasive species control, etc.) and 10% for recreational management tasks (public rights of way cutting, visitor site and TIC maintenance, etc.). 'Other' in figure 1 includes maintenance of signs and boards, wreck and obstruction removal, maintenance of ranger billets and replacement of channel markers.

**Figure 1**

Percentage of Construction and Maintenance staff time allocated to navigation tasks in 2019/20



- 5.2. Following the open tendering process for hydrographic surveying across the Broads for the next three years, the successful surveying firm has been appointed. The round of surveys lined up for the end of this winter includes the whole of the River Waveney and Oulton Broad, as well as the marked channel through Hickling and Heigham Sound. The high density data gained through these surveys, will allow accurate calculation and mapping of sediment volumes falling outside the Waterways Specifications. Given that surveys are not planned until March 2020 (the optimal time due to fewer water plants

and low boat traffic), reporting on compliance and updating the dredging priorities will take place in early summer 2020. This times in with preparing the dredge plans and budget requirements for 2021/22 in late summer 2020.

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Date of report: 9 December 2019

Background papers:

[Notice to Mariners: Closure of Catfield Dyke, Hickling Broad](#)

[Notice to Mariners: Dredging work on South Walsham Broad and disposal operations at Horning Hall, River Ant](#)

[Riverside tree and scrub management](#)

[Broads Plan](#) objectives: 2.1, 2.3, 3.1, 3.2, 4.2, 6.1

Appendix 1 – Dredging progress

## Appendix 1 – Dredging progress 2019/20 (2019 April to end November 2019)

Project title	Active BA dredging weeks completed/ planned	Planned volume removed m <sup>3</sup>	Actual volume removed m <sup>3</sup>	Planned annual project cost <sup>1</sup>	Actual project cost
<b>Hickling Broad</b> a) Dredging of marked channel & habitat creation (Oct - Feb)	4/22	8,000	1,360	149,670	32,750
<b>Tyler's Cut, Dilham</b> a) Dilham Staithe and 600m downstream (Nov - Dec)	4/17	3,000	3,000	40,330	13,630
<b>Mid-Bure</b> a) South Walsham Fleet Dyke (Apr - May) b) Oby to Acle Bridge (Jun - Aug)	22/22	13,000	10,440	126,640	110,720
<b>Oulton Broad</b> Dredging in North Bay (Aug - Sep)	3/9	6,000	1,200	51,680	26,230

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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.

<b>Project title</b>	<b>Active BA 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>2</sup></b>	<b>Actual project cost</b>
Waxham Cut Dredging & sidecast (Nov - Jan)	4/13	4,000	1,560	38,090	27,630
<b>Waveney</b> Beccles to Stanley Carrs (Apr - Jul)	10/16	8,000	5,570	102,550	85,340
<b>Lower Bure</b> Plough dredge (Mar)	Contractor	2,000	0	10,000	0
<b>Site restoration</b> Stokesby, Lower Bure & Postwick Tip	-	-	-	43,540	33,240
<b>Site preparation</b> Peto's Marsh, Carlton Marshes	-	-	-	15,860	12,340
<b>Total</b>	<b>47/99</b>	<b>44,000</b>	<b>23,130</b>	<b>578,360</b>	<b>341,880</b>

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2 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.