A MEETING OF THE NORFOLK RIVERS INTERNAL DRAINAGE BOARD WAS HELD VIRTUALLY BY ZOOM VIDEO/TELEPHONE LINK ON THURSDAY 13 AUGUST 2020 AT 10.00 AM.

Elected Members

* H C Birkbeck
* J Borthwick
* J F Carrick
H G Cator
* N W D Foster
C Joice
* J P Labouchere
M R Little
N Middleton
T Mutimer
* M J Sayer
S Shaw
* R Wilbourn
Vacancy
Vacancy

Appointed Members

Breckland DC

* S G Bambridge
W Borrett

Broadland DC

* N Brennan
* K Kelly
N Shaw

Jointly Appointed

I Devereux
L Monument
Vacancy

North Norfolk DC

* H Blathwayt
* P Bütikofer
N Housden
* J Toye
Vacancy

South Norfolk DC

T Holden
* N Legg
* R Savage

* Present (48%)

J Carrick in the Chair

In attendance:

Karen Bingham (Business Support Officer), Cathryn Brady (Sustainable Development Manager), Phil Camamile (Chief Executive), Sue Cook (PA to CEO), Paul George (Operations Engineer WMA Eastern), Sallyanne Jeffrey (Finance and Rating Manager), Caroline Laburn (Environmental Manager) and Matthew Philpot (Project Engineer, WMA Eastern)

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46/20	**APOLOGIES FOR ABSENCE**	
46/20/01	Apologies for absence were received on behalf of Bill Borrett, Henry Cator, Nigel Housden, Charles Joice and Mark Little. ***Post meeting note:*** *Apologies for absence were received from Nigel Middleton after the meeting had started. Pierre Bütikofer joined the meeting but had an intermittent internet connection.*	
47/20	**WELCOME AND INTRODUCTIONS**	
47/20/01	The Chairman welcomed everyone to the second virtual meeting of the Board, in particular, Nigel Middleton and Charles Joice as new members of the Board co-opted at the previous meeting. He also introduced Nigel Brennan who had replaced Justine Thomas as a representative for Broadland District Council.	
48/20	**DECLARATIONS OF INTEREST**	
48/20/01	There were no declarations of interest other than those already recorded in the Member's Register of Interests.	
49/20	**MINUTES OF THE LAST BOARD MEETING**	
49/20/01	The minutes of the last Board meeting held on 30 April 2020 were approved and confirmed as a true record. It was noted that the Chairman would sign the minutes shortly after the meeting. Arising therefrom:	
49/20/02	**Corporate Social Responsibility Summer Walks (30/20/06)** The Operations Engineer reported that the planned CSR Summer Walks would be deferred until Summer 2021. RESOLVED that this be noted.	
49/20/03	**Castle Acre Common (30/20/07)** The Chairman reported that a visit to Castle Acre would hopefully be arranged after the next Board Meeting on 15 October 2020. RESOLVED that this be noted.	**All to note**
50/20	**TO CONSIDER THE BOARD'S HEALTH, SAFETY AND WELFARE PERFORMANCE REPORT**	
50/20/01	The Health, Safety and Welfare Performance Report (a copy of which is filed in the Report Book), was considered in detail and	

approved. The Operations Engineer confirmed that Health, Safety and Welfare used to be included as a section within the Engineering Report, however, given the importance of Health & Safety it would now be presented as a separate agenda item in this format across all the WMA Eastern Drainage Boards, moving forward. RESOLVED that this be noted. There were no matters arising.

51/20 ENGINEERING AND OPERATIONS REPORT

51/20/01 The Engineering and Operations Report (a copy of which is filed in the Report Book), was considered in detail and approved. Arising therefrom:

51/20/02 Plant Replacement Policy (paragraph 3.1)

It was agreed and thereby RESOLVED to approve the change to the Board's Plant Replacement Policy, which now stated that purchases and sales of all Group A mobile plant needed the Board's prior approval, with all Group B and Group C purchases and sales being delegated to the Executive Committee. RESOLVED that this be noted.

52/20 ENVIRONMENTAL REPORT

52/20/01 The Environmental Report (a copy of which is filed in the Report Book), was considered in detail and approved. Arising therefrom:

52/20/02 Jason Borthwick said he would like to host as many owl boxes as would be suitable across his land. The Environmental Manager agreed to pass his details on to Colin Shawyer so this could be arranged. RESOLVED that this be noted. **CL**

52/20/03 Michael Sayer asked whether Colin Shawyer had been active this summer and the Environmental Manager said that he had not been as active as normal because due to the pandemic he was not able to stay overnight, so was currently only monitoring boxes that he was able to access within a day trip. RESOLVED that this be noted.

53/20 PLANNING REPORT

53/20/01 The Planning Report (a copy of which was filed in the Report Book), was considered in detail and approved. Arising therefrom:

53/20/02 John Labouchere passed on his congratulations for the increase in the number of applications that the Planning Team were now involved with. The Sustainable Development Manager reported that the team needed to increase its engagement with North **All Cllrs**

Norfolk, Broadland and South Norfolk District Councils and the assistance from Cllr Nigel Housden to this end was much appreciated. Gordon Bambridge encouraged all Councillors on the Board to ensure that their planning departments were aware of the IDBs and for them to understand the need to liaise with the IDBs.

54/20 FINANCIAL REPORT FOR THE PERIOD 1 APRIL 2020 TO 30 JUNE 2020

54/20/01 The Financial Report for the period 1 April 2020 to 30 June 2020, was considered in detail and approved, (a copy of which is filed in the Report Book). The Finance & Rating Manager informed the Board that aside from the second payment on account due by the Councils on the 01 November for Special Levies, there was only £3,200 owed to the Board by ratepayers with further payments continuing to be received as people come out of isolation and return to work. There were no other matters arising.

55/20 SCHEDULE OF PAID ACCOUNTS

55/20/01 The Schedule of Paid Accounts for the period 1 April 2020 to 30 June 2020, totalling £98,339.45 (a copy of which is filed in the Report Book) was considered in detail and approved. There were no matters arising.

56/20 MATERIAL CHANGES TO RISK REGISTER

56/20/01 Members considered and approved the risk register for those risks with a risk assessment matrix score of ≥ 6. It was noted that the risk of pandemics had been added to the register (valued at 3). RESOLVED that this be noted.

57/20 CORRESPONDENCE

57/20/01 The Chairman informed members that Desmond Mack had resigned from the Board, which was a shame due to his family's long association with the Board.

58/20 NEXT MEETING

58/20/01 The next meeting would take place on Thursday 15 October 2020 at 10.00 am, either at Breckland District Council and/or by Zoom video/teleconference link. The Chairman asked members to keep the afternoon of Thursday 15 October free for the planned visit to

All to note

Castle Acre.

59/20 ANY OTHER BUSINESS

59/20/01 There was no other business.

60/20 OPEN FORUM: TO HEAR FROM ANY MEMBER OF THE PUBLIC, WITH LEAVE OF THE CHAIRMAN

60/20/01 There were no members of the public present at today's meeting.

61/20 CONSORTIUM MATTERS

61/20/01 Unconfirmed Minutes

The unconfirmed minutes of the last Consortium Management Committee meeting held on 26 June 2020 were considered in detail and approved. There were no matters arising.

61/20/02 Schedule of Paid Accounts

The WMA Schedule of Paid Accounts for the period 1 March 2020 to 31 March 2020 totalling £136,829.75 as approved at the Consortium Management Committee meeting on 26 June 2020, was considered in detail and adopted by the Board. There were no matters arising.

61/20/03 WMA Financial Report

The WMA Financial Report for the period 1 April 2019 to 31 March 2020, as approved at the Consortium Management Committee meeting on 26 June 2020 was considered in detail and adopted by the Board. There were no matters arising.

61/20/04 Issues for discussion at next CMC meeting

There were no specific issues raised by members that would require discussion at the next Consortium Management Committee (CMC) meeting on 25 September 2020. Should members wish to raise any item for discussion at the next meeting, they should contact any of the Board's representatives, or the Chief Executive directly: members were reminded that the Board's representatives on the CMC were John Carrick, Gordon Bambridge and Henry Cator. RESOLVED that this be noted.

62/20 CONFIDENTIAL BUSINESS

62/20/01 It was agreed and thereby RESOLVED to exclude the public from

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	the next part of the meeting due to the confidential nature of the business to be transacted, in accordance with Section 2 of the Public Bodies (Admission to Meetings) Act 1960.	

Water Management Alliance (Eastern) Health, Safety and Welfare Performance Review

1. **This report covers the period from to 3 January 2020 – 22 July 2020**

1.1.1. The health, safety & welfare (HSW) of our staff are of upmost importance to the WMA. The following report details HSW related work which has been carried out by officers in the last quarter and also draws information in relation to the topics raised by the Association of Drainage Authorities in its 2020 review.

1.1.2. Staff were all reminded of the Health & Safety Executives (HSE) annual fatality statistics, which highlight the risks of working on construction sites. Many of the highest causes of fatalities on site are linked to operations which we work with regularly, such as being struck by moving plant and falls from height. The importance of good H&S standards was reinforced to staff and particularly operations managers, who lead teams.

2. Learning events

2.1. No learning events received this quarter

3. Accidents

3.1. Accident July 2020 – Pillar Drill handle struck employee in eye. Injury was minor and employee returned to work the next day. The accident is not notifiable to the HSE, but has been recorded in the accident book.
We have reviewed and revised our Generic Risk Assessment (GRA) for the use of the pillar drill, following the accident investigation. This has been briefed to the workshop manager who will now approve the use of the drill before it is operated by any employees. We have also located the GRA for the drill adjacent to it, which will ensure any users see the guidance before use (however all staff will also be briefed on the new GRA).

3.2. The incident has also been used to review the GRA for the operation of the Band Saw, which is the other major piece of cutting equipment in the workshop. This has led to a revised generic risk assessment being developed and a more robust procedure for use.

3.3. The fabrication skills of our M&E team are reliant on having these tools available, however in the vast majority of cases our fitter and workshop manager completes any fabrication work. Through amending the GRAs we have now specifically stated that all staff must get approval from him before using these tools, which will help to ensure safe operation.

3.4. This will be briefed to all staff within the next month.

4. Toolbox Talks & Training

Toolbox Talks given to;

4.1. Mechanical & Electrical Engineers on Battery charging procedures and revised battery charging GRA. We have also improved signage around our battery charging point in the workshop.

4.2. Mechanical & Electrical Engineers on use of the Dynamic Risk Assessment in reviewing on site risks and documenting changes to Safe Systems of Work issued to them.

4.3. All operational staff who tow trailers on safe towing procedures. We have also upgraded our pre-tow checks and safe systems of work for confirming trailers have had detailed checks through the introduction of a tag system.

4.4. Updates made to the excavator & tractor daily check sheet. Daily checks of equipment are required under the Provision & Use of Work Equipment Regulations (PUWER). This quarter eastern boards have reviewed and rationalised a number of excavator & tractor check sheets to one standard document which will now be used across all WMA Eastern boards.

4.5. Office Staff: DSE assessments completed/reviewed for any new working arrangements.

5. Updates to Generic risk assessments

Note: All GRAs are reviewed annually in January of every year, however these are live documents and as such any improvements or changes needed from learning events or industry best practice are completed at any point during the year. Updates Made to;

5.1. RA 18 Operation of Telehandler: Reference to new rescue plan added for when using the Mobile Elevated Work Platform (MEWP) attachment.

5.2. M&E GRA08 Battery charging and handling: Updated with fencing requirements

5.3. M&E GRA09 Use of Pillar Drill: Updated following learning detailed above with new reference to Workshop manager approval before use.

5.4. M&E GRA10 Use of Band Saw: Updated following learning detailed above with new reference to Workshop manager approval before use.

6. Health & Safety inspections *(these are carried out quarterly by Copes, our independent safety consultant)*
Health & Safety inspection from *Copes Safety Ltd* June 2020.

6.1. The visit was very productive with some recommendations relating to battery charging risks, MEWP plans and trailer safety. These have then been picked up in the work shown above.

6.2. A site visit was made to a pumping station where fencing work was underway. Minor issues around site safety were raised, which have all been rectified/completed.

ENGINEERING, OPERATIONS AND ENVIRONMENTAL REPORT AUGUST 2020

The Engineering and Operations Teams continue to plan and manage maintenance and capital projects throughout the NRIDB catchment area, facilitated by the Environmental Team. The following information pertains to operations and schemes carried out for the Norfolk Rivers IDB, from the **15 April 2020 – 01 August 2020:**

1. REVENUE MAINTENANCE WORKS

1.1 Routine maintenance works were carried out on board main drains in the following districts:

Norfolk Rivers Machine Operative (BIDB Machine)

Bure:	Aylsham, Burgh Next to Aylsham, Marsham & Brampton, Buxton & Hevingham
North Norfolk:	Stiffkey

Contractor's Machine: (GDR Ltd)

Bure:	Kings Beck, Marsham & Brampton
Wensum:	Salle, Foulsham, Ringland & Morton, Swannington, Bylaugh, Swanton Morley, Great Ryburgh B
Upper Yare and Tas:	Flordon to Caister St Edmunds

Handwork: NRIDB Operatives

Numerous sites across the whole of the district.

2. RECHARGE WORKS

2.1 Operative working for the Broads Internal Drainage Board on Capital project work:

1.5 weeks at Martham Culvert
4.5 weeks at Muckfleet

Watercourse maintenance for private landowners in the following districts:

Bure:	Buxton & Hevingham
Wensum:	Swannington Swanton Morley

3. PLANT

3.1 Plant Replacement Policy

An update to the plant replacement policy is included in Appendix A. The change to policy is:

- Page 1: The inclusion of the sentence *'Board sign off of proposed purchase required at board meeting'*, which was not unambiguously stated in the previous version.

- Page 5: The asterisk related to truck replacement period as 3 years*, being conditioned 'as per warranty period' as our new trucks have a 5 year warranty.

- Version control box added to the end of the policy.

Board approval Required: Update to plant replacement policy, to version 2.

3.2 Plant Replacements

Full details and quotes have been obtained by officers for the proposed plant purchase by the board. These are set out in confidential business, due to the commercial nature of the financial details.

4. CAPITAL SCHEMES

4.1 Castle Acre Common to West Acre Water Environment Grant (WEG) Project

Site Notice Board

Environmental mitigation and enabling works have continued with construction due to start on 3 August 2020. Landowner discussions have continued and agreements are to be signed prior to starting construction.

Charles Rangeley-Wilson has designed the works, NRIDB will act as the Principal Contractor with GDR carrying out the work. Delivering this using a framework contractor will save approximately 20% compared to the contractor used for phase 1. This also provides a development opportunity for the framework contractor. Construction is estimated to take 8 weeks.

4.2 West Lexham Erosion Repairs

Erosion repairs have been carried out at West Lexham Hall to stabilise a section of riverbank between the River Nar and a lake at West Lexham Hall. Erosion occurred downstream of culvert modification work carried out in 2017 as part of wider restoration works.

The bank has been reshaped and realigned. The toe has been protected with local timbers, backfilled with gravel, held in place using a geotextile membrane.

Aerial as built photograph

5. OPERATIONAL MATTERS

5.1 Framework Supplier Agreement

A review of the Framework supplier process was agreed to be carried out after one year of operation. The review contains business assessments and as such is included in the confidential business section of the report.

5.2 New Storage Facility

We have hired a small area of land to provide storage space for NRIDB operational needs and equipment. This is a secure location on a Farm in Cromer, close to the home of the new operative. This makes him more self-sufficient, reducing running costs. We have entered into a 12-month hire agreement which will be reviewed every year.

6. OTHER MATTERS

6.1 Water Resources East https://wre.org.uk/

WRE have published their Initial Water Resource Position Statement. This sets out the East of England ambition to have sufficient water resources to support a flourishing economy, a thriving environment and meeting the needs of the communities. Further details are in Appendix B.

7. COMPLAINTS/ENFORCEMENT

7.1 Drain near Aldborough Surgery, North Norfolk

The NRIDB was contacted by the Environment Agency and advised that there had been some very poor maintenance, with the potential for hydromorphological harm (under the terms of the WFD), undertaken in the vicinity of the Aldborough Surgery, on what was thought to be an IDB adopted watercourse. On inspection by the Environment Team however, the maintenance was found to be on a

riparian ditch and not the nearby IDB drain. The incident has been passed back to the EA for their further investigation.

8. ENVIRONMENTAL

8.1 Norfolk Rivers Biodiversity Action Plan Information

8.1.1 Barn Owls

Barn owl monitoring continues to be undertaken annually by Colin Shawyer of the Wildlife Conservation Partnership. We recently received the results of last year's Barn Owl Monitoring. Colin summarised his thoughts on last year's breeding success over the WMA (Norfolk) as a whole as follows:

"With regard to the 2019 annual report for WMA, 50% of the barn owl nestboxes were used in 2019 for either roosting or nesting and compared with 2018, use of the nestboxes for nesting was up by 30%. Generally, in some areas of the UK it was certainly a better year in 2019 than 2018 which is what we were expecting given how vole numbers fluctuate from year to year. However in 2019, there were quite a lot of losses of first broods due to bad weather in June. Some pairs laid repeat clutches having lost their first and other pairs who had successful early broods produced second broods. Unfortunately, some of these second broods were lost to bad weather in October. On the whole, eastern England including Norfolk was one of the regions that fared better which is reflected in the 2019 annual report."

Brood of five barn owl chicks (Colin Shawyer)

8.1.2 Norfolk Mink Project: January- December 2019

The 2019 results of the Norfolk Mink Project were published by the Chair of the group, Simon Baker and received in early May 2020.

In areas covering North Norfolk we had a total of 9 mink trapped over the area as a whole plus reports of two mink killed on the road. As in previous years, the Glaven was where most were caught. We have also had reports from other rivers and the number of volunteers using project equipment has grown in several catchments.

Within The River Nar catchment captures and sighting of mink continues to be low, only a single animal was trapped in 2019.

Within the River Wensum catchment this year there has been a sudden rise in mink numbers caught compared with 2018, all bar one on the middle to lower reaches of the river from North Elmham to Hellesdon.

A Remoti telemetry unit fixed to a mink trap

The Norfolk Mink Project Newsletter 2019 is shown in Appendix C.

9. MEETINGS OR TRAINING ATTENDED BY ENVIRONMENT TEAM DURING PERIOD:

Date Applied	Meeting / Training Attended	Brief Description
04/06/2020	Broads Test and Trials Meeting	Progress and update on the ELMS Test and Trials project for Broadland
18/06/2020	EA Partnership Funding Webinar	EA Webinar attended to gain awareness of the new arrangements for FCRM and new Partnership Funding changes which will come about as of 26th June 2020.
19/06/2020	ISO 14001 Management Meeting	Review of internal Environmental Quality Management System audit.
09/07/2020	Next steps for biodiversity and species protection in the UK - Webinar	Webinar discussing the future of Biodiversity in the UK following the introduction of the Environment Bill as the UK moves to leave the European Union
14/07/2020	White Clawed Crayfish meeting	Zoom meeting hosted by the NRT. This meeting included updates on new ways from preventing Signal Crayfish from travelling upstream of structures.
24/07/2020	IDB / ADA Governance Review Meeting with and the EA	The EA and ADA are undertaking a Governance Review of all IDBs in response to the new legislation as created by the Environment Bill. The WMA's Environmental Governance procedures to all aspects of our activities are being looked at as part of this process.

10. PRE-WORK SITE VISITS UNDERTAKEN DURING THE PERIOD:

Date	**Officer**	**Project / Maintenance**	**Site**	**Comments**
21-04-20	HM	Maintenance	River Stiffkey	Site visit to carry out water vole presence/absence surveys on berms that needed to be removed to allow water flow and reduce erosion, with Paul G and Wayne R.
23-4-20	JLM, TJ	Maintenance	Scoping at Lenwade Charity Lakes	Scoped between Lenwade Bridge and Walcis Farm. Some Himilayan Balsam (<5 very small plants) found at Walcis Farm. HRA needed if de-silt undertaken or working on terrestrial SSSI. Lots of pioneer clearance needed around Charity Lakes. Works TBC.
23-04-20	HM	Maintenance	Lenwade	Scoping visit with Gary R to Swannington Beck near Alderford common. Gary wanted to flail scrub and remove some small trees. So these areas were checked for birds.

29-04-20	HM	Maintenance	Thurning	Scoping a series of drains at Thurning for maintenance with Paul G.
4-5-20	JLM, CL	Project	West Acre	Destructive searches as part of water vole mitigation. All destructive searches done at both upstream and downstream end.
21-05-20	HM	Maintenance	Drayton Low Road - Place Farm. NR8 6HD	Maintenance scoping visit with Paul George
22-05-20	HM	Project	Castle Acre, River Nar	Site visit to the River Nar with Paul George, Charles Rangeley-Wilson and 5Rivers to look over the project site at West Acre/Castle Acre Common.
22-05-20	HM	Maintenance	East Raynham, lake	Site visit with Paul George and Gary Riseborough to take measurements on two structures on the lake. A water vole survey was carried out on a drain that will need to be culverted.
28-05-20	HM	Maintenance	Lexham, River Nar	Scoping a section on the River Nar with Paul George and Neil Foster to assess the amount of weed present at East Lexham Hall. Paul then took levels of a gravel riffle downstream of East Lexham that may need lowering.
11-06-20	HM, JLM	Project	River Nar, Castle Acre and West Acre	Floodplain survey on Castle Acre Common, this was to compare the data pre restoration works. Used the MORPH tool to assess the woodland channel at West Acre before river restoration.
22-06-20	HM, JM	Maintenance	Flordon, River Yare, Tas	Scoping out maintenance, CWS and SSSI present.
24-06-20	HM, PG	Maintenance	East Ruston	Scoping out drain for maintenance.
01-07-20	HM, PG	Maintenance	Costessey Mill	Scoping out drain for maintenance, SSSI present.
03-07-20	HM, JM	Project	Aldborough	Scoping out the site, water vole survey. Confirming their presence because the survey was done in 2019.
07-07-20	CL, JM	Complaint	Aldborough	Response to EA maintenance concerns on IDB Drain. Found to be a riparian owner issue.
8-7-20	JLM, PG	Project – BAP	Holme Marshes	Meeting with NE and landowner to assess proposals for habitat enhancement with respect to impacts on IDD, Main Drains, and IDB delivery through BAP budget. PG to put together costings as a result of meeting.
22-07-20	HM, PG	Maintenance	Foulsham and Aldborough	Scoping out drain for maintenance.

11. ASSENTS/LICENCES GRANTED AND/OR APPLIED FOR DURING THE PERIOD:

License / Assent / Habitat Regulations Assessment	Applied	Granted
Application to the Common Act Section 38 to be able to work on Castle Acre Common, River Nar restoration as part of the WEG project at West Acre	13-02-20	29-04-20
River Nar, West Lexham erosion bank repair, Natural England SSSI assent	15-05-20	19-05-20
Burnham Deepdale Giant Hogweed herbicide application licence, 3c. 3 large plants	04-06-20	21-07-20
River Nar Castle Acre/ West Acre WEG Natural England SSSI Assent, River Restoration	15-07-20	

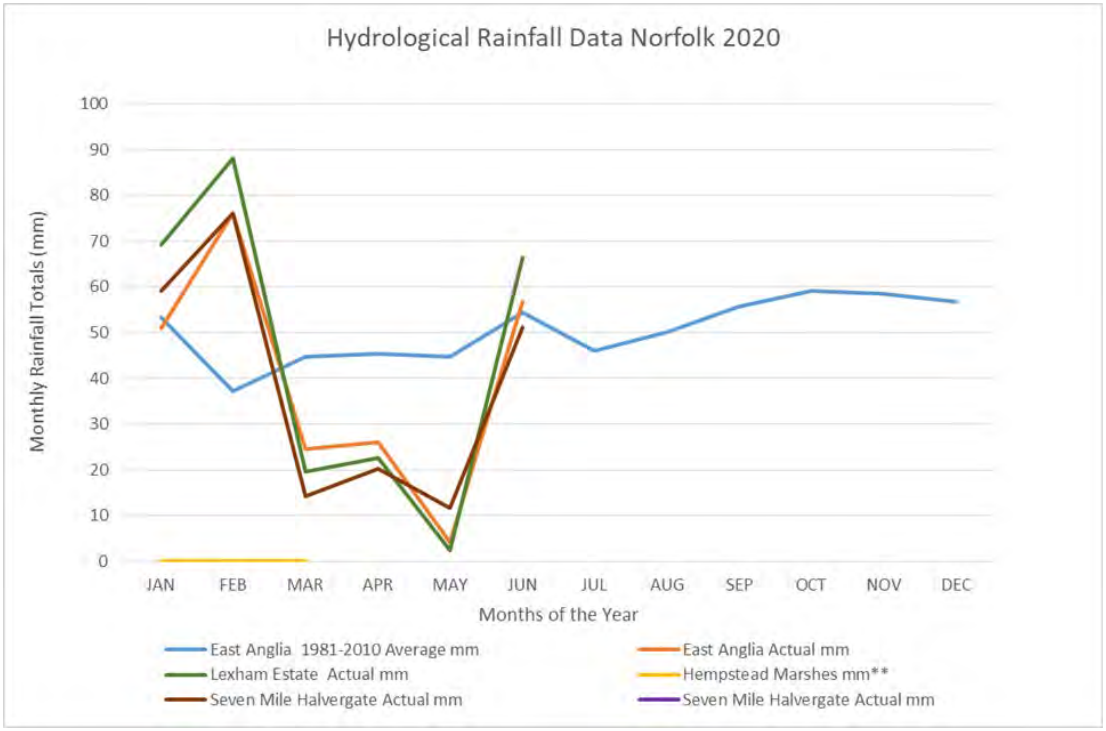
12. HYDROLOGY – UK Overview

https://www.metoffice.gov.uk/pub/data/weather/uk/climate/datasets/Rainfall/date/East_Anglia.txt

12.1 May began with a shallow area of low pressure which brought cool showery weather, but high pressure built from the north-west between the 2nd and 4th, turning the weather more settled. There was plenty of warm sunny weather for most between the 5th and 9th, but showers broke out in places from the 7th onwards. Northerly winds brought a cold snap from the 10th to 15th, with wintry showers for the north and east of Scotland, and some overnight frost. There was a more changeable spell from the 16th to 23rd, but with plenty of warm sunshine at times in the south. High pressure dominated from the 24th bringing generally dry, sunny and warm weather.

12.2 Much of April was fine and settled, though with some shorter spells that brought rain. High pressure was located in the vicinity of the UK for much of the time, often to the north, and so easterly winds were a regular feature. Less settled spells came from the 1st to 6th, the 11th to 13th, and most notably a cyclonic spell from the 27th onwards. Plenty of sunshine generally allowed daytime temperatures to rise well above normal on numerous days, whereas minimum temperatures were barely above normal and in fact northern and eastern Scotland had several late frosts. Rainfall was well below normal quite widely, with only central southern counties of England having near-average rain totals.

12.3 The very sunny and warm weather of late May continued into the start of June, but a cool northerly type became established from the 3rd to 7th, bringing showers and some longer spells of rain. After a brief settled interlude, it turned wet almost everywhere by the 10th. Around mid-month there was a spell of warm, humid, showery weather with thunderstorms especially in central, western and southern areas, and persistent low cloud along the north-east coast. There was a hot sunny spell especially over England from the 23rd to 25th, which triggered a thundery breakdown in places. The last few days were cloudy and windy with showers and longer spells of rain, with especially persistent and heavy rain in parts of Cumbria.



	East Anglia 1981-2010 Average mm	East Anglia Actual mm	Lexham Estate Actual mm	Hempstead Marshes mm**	Seven Mile Halvergate Actual mm
JAN	53.4	50.9	69.1	0	59
FEB	37.2	76.1	88.1	0	76
MAR	44.8	24.5	19.6	0	14.2
APR	45.3	26.1	22.6		20.2
MAY	44.8	4.2	2.3		11.6
JUN	54.3	56.8	66.5		51.2
JUL	46				
AUG	50.1				
SEP	55.6				
OCT	59				
NOV	58.5				
DEC	56.8				

* http://www.metoffice.gov.uk/climate/uk/summaries/2020

Giles Bloomfield – Catchment Engineer (WMA Eastern)
Matthew Philpot – Project Engineer (WMA Eastern)
Tom Jones – Operations Engineer
Paul George – Operations Engineer
Caroline Laburn – Environmental Manager
Helen Mandley – Environmental Officer
Jamie Manners – Environmental Officer

Planning Report

1. Reporting Period

This planning report covers the reporting period 15 April 2020 to 28 July 2020.

2. Consent Applications

There are currently 9 consent applications being processed. The most common types of consent that the Board receive and determine in its regulatory capacity are set out in the table below alongside the current breakdown of cases.

Application Type	*Number*
Byelaw 3 (B3) – Discharge of Treated Foul Water (TFW):	0
Byelaw 3 (B3) – Discharge of Surface Water (SW):	4
Byelaw 4 (B4) / Section 23 (S23), LDA 1991 – Alteration of watercourse:	4
Byelaw 10 (B10)– Works within 9 m of a Board's maintained watercourse:	1
Total:	9

The current status of these applications are;

Application Type	*B3 - TFW*	*B3 - SW*	*B4/S23*	*B10*	*Total*
Awaiting further information from the applicant:	0	1	2	0	3
Awaiting applicants acceptance of conditions:	0	1	0	0	1
Being processed by officers:	0	2	2	1	5
To be determined by the Board in this report:	0	0	0	0	0
Total:	0	4	4	1	9

As is highlighted by the table above there are no applications requiring consideration by the Board in this report.

3. Consents Determined

During this reporting period, the following 3 consents under the Land Drainage Act 1991 and Board's Byelaws have been determined by Officers in accordance with their delegated authority.

Application Type	*Number*
Byelaw 3 (B3) – Discharge of Treated Foul Water (TFW):	0
Byelaw 3 (B3) – Discharge of Surface Water (SW):	1
Byelaw 4 (B4) / Section 23 (S23), LDA 1991 – Alteration of watercourse:	0
Byelaw 10 (B10)– Works within 9 m of a Board's maintained watercourse:	2
Total:	3

These determined consents are listed in more detail in the table below.

Case. Ref.	Case File Sub-type	Parish	Location / Site Name	Description of Application or Proposal	Determination
20_02416_C	Byelaw 3 Surface Water	Reepham	Church Street	Revised surface water arrangements from 1 dwelling	Granted 02/06/2020
20_02604_C	Byelaw 10	Honing	Ridlington Street	Bridge over Adopted Watercourse	Granted 13/07/2020
20_02825_C	Byelaw 10	Ringland	The Street	Bridge over Adopted Watercourse	Granted 28/07/2020

4. Enquiries

Officers have responded to 12 enquiries during the reporting period, outlined below;

Case. Ref.	Enquiry Type	Parish	Description
20_02441_N	About works	Horning	Enquiry regarding subsidence
20_02443_Q	About Regulation	Felthorpe	Enquiry regarding fly tipped waste
20_02494_Q	About Planning	Honingham	Enquiry regarding carriageway works
20_02495_Q	About Planning	Colney	Enquiry regarding flood risk assessment information
20_02566_Q	About Regulation	Honing	Enquiry regarding Land Drainage Consent
20_02567_Q	About Regulation	Yaxham	Enquiry regarding Land Drainage Consent
20_02588_Q	About Regulation	Yaxham	Enquiry regarding Land Drainage Consent
20_02680_Q	About Regulation	Holme next to the Sea	Enquiry regarding Land Drainage Consent
20_02790_Q	About Regulation	Pentney	Enquiry regarding Land Drainage Consent
20_02794_Q	About Regulation	Hingham	Enquiry regarding Land Drainage Consent
20_02799_Q	About works	Wymondham	Enquiry regarding fallen tree
20_02837_Q	About Regulation	Pentney	Enquiry regarding Land Drainage Consent

5. Planning Comments

Officers have provided comments on 21 applications that are either in or could impact on the Boards Internal Drainage District. 9 of these applications are for major developments and are summarised below;

Planning App. Ref.	Parish	Location / Site Name	Description
3PL/2019/0874/F	North Elmham	Holt Road	Residential Development of 25 dwellings
06/20/0075/D	Martham	Repps Road	Residential Development of 48 dwellings
3PL/2019/1430/F	Yaxham	Dereham Road	Commercial Development
PO/20/0525	Ryburgh	Fakenham Road	Residential Development of 50 dwellings
PO/20/0524	Ryburgh	Land North	Commercial Development
PF/20/0523	Ryburgh	Land North	Commercial Development
2020/0903	Keswick	Ipswich Road	Commercial Development
15/00942/DISC_B	Castle Acre	Massingham Road	Residential Development of 11 dwellings
PF/20/0578	Aldborough and Thurgarton	Aldborough Road	Commercial Development

6. Fees

There have been no surface water development contribution fees invoiced or paid during the reporting period.

7. Local Planning Authority (LPA) Engagement

The Broad's Senior Sustainable Development Officer has been in ongoing correspondence with the Lead Local Flood Authorities operating within the WMA area, and will now be focusing on engagement with District Councils. Specifically, within the upcoming reporting period it is hoped that engagement with North Norfolk, Broadland and South Norfolk District Councils will be improved.

Cathryn Brady – Sustainable Development Manager

APPENDIX A

NORFOLK RIVERS IDB PLANT REPLACEMENT POLICY

Policy Objectives:

The objective of this policy is to ensure Norfolk Rivers IDB's plant, vehicles and other mechanical equipment are available in good working order so as to achieve the best cost benefits for Norfolk Rivers IDB. The aim of the Plant and Equipment Replacement Policy is to;

- Follow replacement guidelines and principle of life cycle costs to assess replacement of the plant and equipment.
- Maximize inputs from operators & maintenance team to prepare plant replacement requisition
- Optimize the vehicle maintenance program to have longer replacement cycle.
- Avoid repeated & time consuming evaluation for plant and equipment that is in good working order.
- Project a 5 year replacement program for high value plant and equipment & review the Replacement Program to act in accordance with Norfolk Rivers IDB's needs.

Policy Statement:

Replacement Requisition:

- Replacement request must include following:
    a. Reference to standard replacement cycle
    b. Specific reasons (if doesn't match with standard replacement cycle)
    c. Number of hours/ kilometers/miles & Years of plant being replaced
    d. Annual maintenance cost since procurement (where possible)
    e. Life cycle cost
    f. Safety related concern (if any)
    g. Major maintenance requirements (if any)
    h. New purchase price/quotes

Board sign off of proposed purchase required at board meeting

Replacement Periods:

- Replacement periods will be set to provide the best economic turnover result for Norfolk Rivers IDB whilst also taking into account of Norfolk Rivers IDB's operational requirements and financial resources. The following plant replacement cycle has been adopted and is based on discussions with the Catchment Engineer, Operations Manager, Plant Engineer and the Board. This replacement cycle can be reviewed annually or as per the discretion of the Board.
- All plant (excluding small plant), should be reviewed at least 12 months prior to the Recommended Replacement Cycle or if usage/condition dictates an earlier review.
- Plant and equipment with occasional, limited usage will be individually assessed and recommended for replacement where their one-time maintenance cost reaches 60% of the current value.
- The replacement cycles are to be considered as a guide and plant and vehicles may be replaced earlier or later depending on market value, condition and requirements. The overriding objective is to ensure the maximum return and value for the Board.
- The Catchment Engineer, in consultation with the Operations Manager, will review replacement cycles as outlined below on a case by case basis as part of the Board's 5 year replacement projections, and make appropriate recommendations to the Board for the replacement.
- Consideration may also be given to machines that experience high levels of maintenance and repair costs.
- Consider extended warranties and buy backs.

Plant Replacement Cycles by Plant Category:

Group A - Very High value, hours based work, minimal visible wear and tear, high repair cost.

All plant in group A, are deemed as very high value. The work these machines undertake are repetitive and hardworking, cost can be high when maintaining these machines and it is advisable to replace these items of plant as shown below to ensure the Board get the operational best out of the items of plant. Where applicable it would be advantageous to the Board to agree a buy back deal with the suppliers of the plant to ensure the Board received the best deal, however this would only be applicable if a replacement item of plant is purchased from the same supplier/manufacturers as that being sold.

1. Excavators. The proposed replacement for all excavators is 7 years/7000 hours. It has been noted from previous repair and maintenance costs, that the maintenance costs start to accelerate once 7000hours are reached. The tracks, hydraulic rams & other expensive parts, tend to need replacing.
2. Tractors. Any new tractor should be change every 5 years/5000 hours and new tractors purchased by the Board should try to get a 5 year extended warranty.
3. Teleporters. The proposed replacement for the teleporter is 7 years/7000 hours.

Group B - Medium value, visible wear and tear, moderate repair cost, used as site support.

All plant in group B, are deemed as medium value. These vehicles and items of plant assist with transporting, maintenance, and operational duties.

1. Trailers that are used for carting silt, soil, stone, all materials etc. are used to transport materials across the drainage district, assisting with various operations. These trailers are more frequently used in the winter months, the general maintenance costs for these trailers are minor, with mainly replacement tyres' being the biggest cost. Providing the state of the trailer is in suitable condition, and there is no damage to the trailer, the replacement will be as and when required but a minimum of 10 years as a guide.

2. The 4x4 Trucks are used for site transport for supervision and maintenance purposes. These vehicles will be replaced every 3 years or 100,000 miles depending on condition. We will aim to have one make and model and color of truck, with branding, for all staff to ensure the best deals are negotiable and to form a consistent company image.
3. Polaris transporter/site vehicle. Replacement should be based on 5 years/5000 hours. Extended Warranties should be considered as part of any purchase.
4. Welfare unit. The replacement period for welfare units is 10 years, or as required should Health & Safety Regulations require.
5. Specialist attachments: The proposed replacement period for specialist attachments is 5 years, or as per warranty period.
6. Weed baskets will be replaced when the machinery is replaced, however a condition survey will be undertaken to decide if it is necessary to change the item of plant at that time or not.
7. Flails will be replaced when the machinery is replaced, however a condition survey will be undertaken to decide if it is necessary to change the item of plant at that time or not.

Group C – Hours based work, low use, low repair cost, frequent maintenance required.

All the plant in group C, is more specialist plant that will not necessary be used for long periods of time, but are essential for the operational procedures to be delivered as part of the maintenance programme. This plant will have an annual conditional assessment and it will be reassessed as to whether it may require changing in the next financial plant renewal year, or it will be replaced if there are unforeseen circumstances why it is not suitable for operational works. Indicative replacement cycle of at least 10 years for all items in this category.

SUMMARY OF PLANT REPLACEMENT CYCLES

GROUP A	**Very High value, hours based work, minimal visible wear and tear, high repair cost.**		
ASSET TYPE	YEARS	HOURS	COMMENTS
Excavators	7	7,000	
Tractor	5	5,000	
Teleporter	7	7,000	

GROUP B	**Medium value, visible wear and tear, moderate repair cost, used as site support.**	
ASSET TYPE	YEARS	MILES
Heavy Trailer	10	Annually inspected and reviewed
Light Trailer	8	Annually inspected and reviewed
4x4 Truck	3*	100,000
Polaris	5	7,000
Welfare unit	10	n/a
Weed Basket	7	n/a
Specialist Attachments	5	n/a
Flail	7	n/a

*as per warranty period

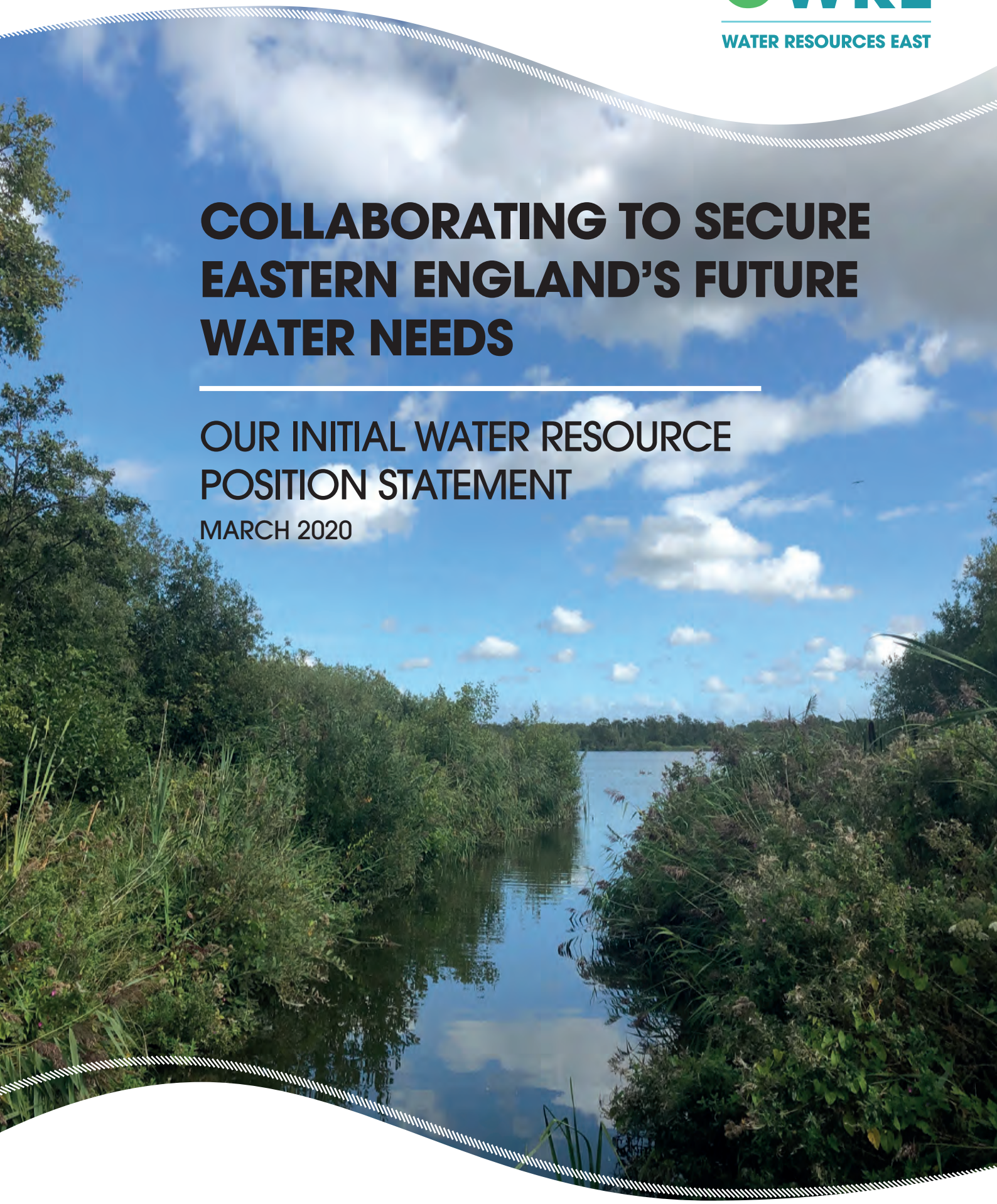
GROUP C	**Hours based work, low use, low repair cost, frequent maintenance required. High lump sum value to replace.**	
ASSET TYPE	YEARS	
GPS Survey Equipment	10	Annually inspected and reviewed
Pumps	10	Annually inspected and reviewed
Plant Transport trailer	10	Annually inspected and reviewed
Various Specialist Plant	10	Annually inspected and reviewed
Minor attachments	5	Annually inspected and reviewed

APPENDIX A

Version Control

Version	Changes made	Date
Original Version 1	n/a	June 2019
Version 2	- Page 1: The inclusion of the sentence *'Board sign off of proposed purchase required at board meeting'*, which was not unambiguously stated in the previous version. - Page 5: The asterisk related to truck replacement period as 3 years*, being conditioned 'as per warranty period' as our new trucks have a 5 year warranty. - Version control box added to the end of the policy.	June 2020

WRE
WATER RESOURCES EAST



COLLABORATING TO SECURE EASTERN ENGLAND'S FUTURE WATER NEEDS

OUR INITIAL WATER RESOURCE POSITION STATEMENT

MARCH 2020

EXECUTIVE SUMMARY

The Water Resources East (WRE) region is characterised by its diversity of water use, including very significant non-public water supply users, particularly for agriculture, food production and energy. The region is under pressure from population growth, climate change and the need to enhance the environment in some of the nations' most iconic landscapes. WRE believe that there is an opportunity to work collaboratively in the region across sectors to tackle the issue of water resources, flood risk management and water quality to enable economic development and environmental improvement. This document sets out our current view of our water resource position and some of the opportunities we have in the region and beyond to tackle this, and states how we will work together with our stakeholders to develop a plan which delivers significant value for our region.

CONTENTS

1. ABOUT WATER RESOURCES EAST

Water Resources East (WRE) was formed in 2014 by Anglian Water, who were keen to learn from international best practice on how to develop a more collaborative approach to water resource management planning in a region under significant pressures. These pressures include high population growth and economic ambition and the need to increase the level of environmental enhancement, all within the context of the need to adapt to and mitigate the impact of climate change.

WRE's focus since 2014 has been on multi-sector water resource planning. Eastern England is characterised by its diversity of water use, including very significant non-public water supply users, particularly for irrigated agriculture, food production and energy.

DRIEST REGION IN THE UK

HIGHEST FORECAST GROWTH OUTSIDE LONDON

INTERNATIONALLY IMPORTANT ENIRONMENTS

LEADING AGRICULTURAL PRODUCER

In response to these challenges, WRE has developed the following overarching strategy for the region:

- Identifying ways in which all users of water in Eastern England can be as water efficient as possible.
- Promoting the need for additional storage of water within the landscape, increasing resilience and seeking to identify multi-sector opportunities to link water scarcity with flood risk management solutions.
- Seeking to transfer water from areas of surplus to areas of deficit, seeking to increase connectivity whilst maximising the use of open water channels.
- Actively exploring other potential sources of water for our region, for example transfers, desalination and water re-use.

In June 2019, Water Resources East became a separate legal entity (a not for profit Company Limited by Guarantee), and is unique among the five Regional Planning Groups in that it now operates as an independent, inclusive, collaborative membership organisation, focused on the co-creation of the Regional Plan with key national, regional and local stakeholders including regulators.

WATER RESOURCES EAST GOVERNANCE STRUCTURE

OUR BOARD OF DIRECTORS

At the time of writing, the following organisations were WRE's Principal Funding Members, funding the central operating costs of the Company, and had appointed non-Executive Directors to the Board of Directors:

- Anglian Water
- Northumbrian Water (Essex & Suffolk Water)
- South Staffs Water (Cambridge Water)
- Severn Trent
- Affinity Water
- The National Farmers Union (NFU)
- Country, Land, & Business Association (CLA)
- RWE Generation UK
- The Association of Drainage Authorities (ADA)
- Lincolnshire County Council
- Norfolk & Suffolk County Councils (co-funding a single Board seat)
- The Broads Authority
- The Catchment Based Approach (led by the Rivers Trust)

OUR STRATEGIC ADVISORY GROUP

Members of the Strategic Advisory Group are Standard members of the company, having formally applied for membership and providing a guarantee of £1 in the event that the Company is wound up. The role of the Strategic Advisory Group is to support and enable the Board of Directors to make informed decisions. Individual members provide specific advice where WRE activities or outcomes have positive or potentially negative impacts on their specialist activities, and members formally vote on key matters as deemed by the Board of Directors.

All members, whether Principal Funding Members or Standard Members are entitled to a single vote on key matters, irrespective of their financial or other contribution.

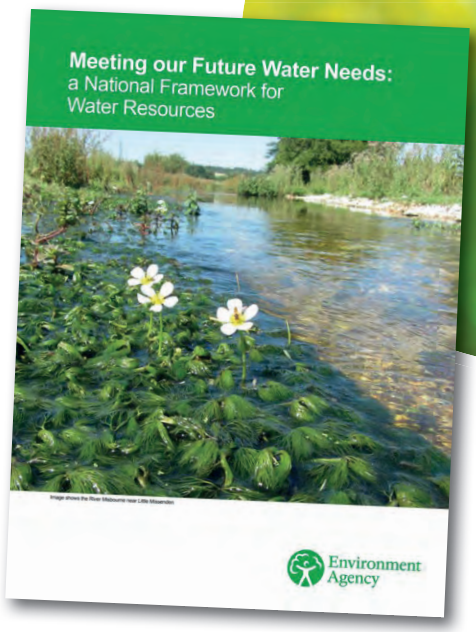
OUR CONSULTATION GROUP

The Consultation Group is formed of organisations who do not wish to, or are unable to become members of the company, for example government organisations, regulators, and customer representatives. This group does not have formal voting rights but is integral in bringing a broad view beyond the membership, bringing welcome challenge and specialised knowledge.

WRE is aiming to have over 100 different organisations actively engaged in the co-creation of the Regional Plan, and at the time of publication almost 70 different organisations were involved.

Membership of the Strategic Advisory Group and the Consultation Group is deliberately open and inclusive, and hopefully very diverse, to ensure that the broadest possible set of views are sought and considered early on and throughout the development of the Regional Plan.

2. BACKGROUND AND PURPOSE OF THIS REPORT



In its 25-year Environment Plan, the UK Government pledged that we would be the first generation to leave the environment in a better condition than we found it. To help meet the pledge to improve resilience to drought and minimise interruption to water supplies, the Environment Agency has led the development of a National Framework for Water Resources in England which was published in March 2020[1]. The National Framework evidences the strategic long-term water needs of England, both nationally and within the boundaries of the regional water resources groups. It does this for all sectors that depend on a secure supply of water while also ensuring the environment is improved.

The National Framework, while led by the Environment Agency, has been developed in collaboration with the regulators Ofwat and the Drinking Water Inspectorate (DWI), and the Department for the Environment, Food and Rural Affairs (Defra), as well as a wide range of stakeholders represented by a senior steering group made up of around 40 water industry representatives, other water users, environmental NGOs, government and regulators from England and Wales.

The National Framework is part of the water resources planning cycle. Five regional groups now exist across England, and the National Framework sets the challenge for these regional groups to work collaboratively to develop ambitious regional water resources plans that provide resilient and efficient water supplies into the future and that have environmental enhancement at their core.

Regional groups such as Water Resources East are critical to the development of integrated plans that include the right strategic solutions for the challenges facing the nation, and each regional group has been tasked with pulling together a single multi-sector integrated water resource management plan.

WRE WATER RESOURCES EAST
WReN Water Resources North
wrse WATER RESOURCES SOUTH EAST
Water Resources West
West Country Water Resources

NATIONAL FRAMEWORK PLANNING TIMELINE

MAR 2020
Initial resouce position statement

JULY 2020
Statements of methods & ambition

FEB 2021
Updated resouce position statement

AUG 2021
Draft plans shared to ensure alignment

JAN 2022
Informal consultation of regional plans

JAN 2022
Pre-consultation of WRMPs

AUG 2022
Final draft of regional plans published

AUG 2022
Draft WRMPs submitted

SEPT 2023
Final regional plans published

SEPT 2023
Final WRMPs published

[1] https://www.gov.uk/government/publications/meeting-our-future-water-needs-a-national-framework-for-water-resources

WRE is currently developing a regional integrated Water Resources Management Plan (the Regional Plan) covering catchment areas across the East of England and part of the East Midlands (herein after referred to as 'Eastern England'). As a group we aim to co-create and build a long-term, multi-sector adaptive plan that reflects the needs and characteristics of our diverse region. This document represents the first stage in our development of the Regional Plan and sets the scene for our region. It is informed by the National Framework, our water company members' 2019 Water Resource Management Plans (WRMPs) together with new and emerging data and information from other sectors.

For the WRE region, this plan will:

- Seek to increase the level of resilience for water resources for all sectors.
- Identify opportunities to deliver wider benefits in terms of flood risk and water quality.
- Identify ways to ensure that water (either too much or not enough) is not a barrier to economic development in the region.
- Seek to enhance the environment, in line with the 25 Year Environment Plan.
- Explore innovative funding and delivery models for water management solutions.
- Promote schemes which represent the best value for the region, seeking through collaboration to deliver more efficient solutions.
- Co-deliver the water related elements of other key regional strategies and plans,
- Focus on delivery of water-related climate change mitigation and adaptation strategies including net zero carbon ambition.
- Provide academically rigorous evidence to policy makers.

WRE's shared vision is that by working together regionally and nationally across all sectors, we will have a joined-up view of the actions that are needed now, for a sustainable future. Working collaboratively we will seek to increase the resilience of water supplies, ensure clarity of roles and responsibilities, protect and improve the environment and drive efficiency, providing value for our region.

This document explores the challenges we need to address, our ambitions as a region and our methods for producing a plan that meets these needs. The following sections introduce the WRE region, set out our initial resource position, the strategic context and our proposed methodology.

Our ambition is that we will co-create the Regional Plan for Eastern England with as many different stakeholders as we can. This will be enabled by our unique structure as a membership organisation, and throughout the production of our Regional Plan we will hold a series of planning conferences to develop sub-Regional Plans and quarterly Strategic Advisory and Consultation Group meetings, where all members and our regulators will meet to discuss progress.

Throughout this process, we will encourage organisations that can offer options to meet the region's water needs to put those forward for consideration in the Regional Plan.

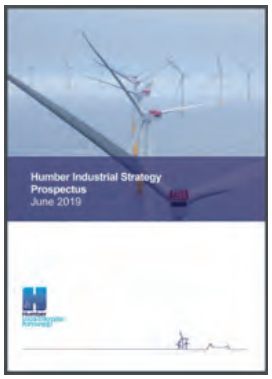
3. INTRODUCING OUR REGION

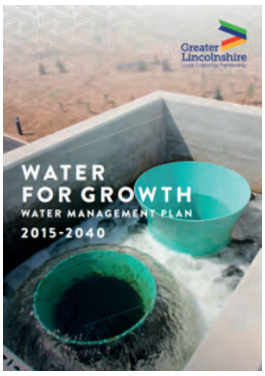
Eastern England is home to some of the UK's most exciting businesses, internationally recognised landscapes and habitats, very fertile agricultural land and some of the most prestigious academic institutions – and it is set to grow rapidly over the coming decades. Three of the UK's five fastest-growing cities, the growth corridors centred on the M1, A1, M11 and a significant proportion of the proposed Oxford-Milton Keynes- Cambridge Arc are all in the Eastern region – making a significant contribution to growth nationally.

But Eastern England has other attributes that make it uniquely vulnerable to water shortage and severe weather events. Nearly 30% of the land mass is below sea level, a huge proportion of the area is used for agricultural production, it is the driest region in the UK and the East has one of the longest coastlines of any region.

With the increasing risk of drought and the surge in demand for food, energy and services that is likely in future, there is a very real risk that a lack of collaborative water management could limit growth and development in our region. The WRE region is predicted to face a significant gap between supply and demand if the region carries on managing water resources in the same way as it does now.

Our region is very diverse in terms of water management issues, and we will be planning along hydrological and political-economic boundaries.





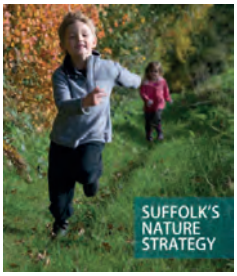
The **South Humber Bank** is characterised by industrial water use by refineries, power stations and manufacturing industry, including British Steel. Much of the area is at risk from flooding, including from the sea, placing it at the forefront, along with other eastern coastal areas, of climate change adaptation. The Humber region has declared itself the 'Energy Estuary' aiming to play a key role in the renewable energy and decarbonisation agenda; here and in other coastal regions, there is an interesting opportunity to think about ways of aligning operations in the energy and water grids. Water in the **Lower Trent** region is used for both public water supply and power generation, but again is an area which has suffered from severe flooding in recent years. The county of **Lincolnshire** is ambitious with regards to water management, viewing water (both scarcity and flood risk) as a constraint to economic development. For this reason, water management forms one of the pillars of the Greater Lincolnshire Local Enterprise Partnership Local Industrial Strategy, and a well-established Water Management Board exists within the county, which WRE planning will align with. There is very strong partnership working with Internal Drainage Boards (IDBs) here and elsewhere within the region; IDBs will be central and key to WRE's strategy.

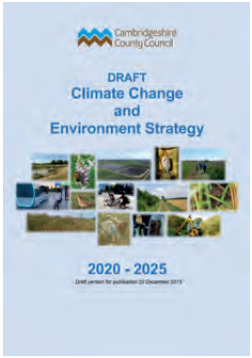
The Fens and counties further to the east are the agricultural heartland of the country, due to the extremely fertile nature of the peat soil. This landscape typifies the balancing of need for intensive agriculture and the requirement to preserve important fen wetland habitats which are extremely effective at carbon sequestration. There is real potential within the fens across Lincolnshire, Cambridgeshire and into Norfolk to manage water in a completely different way, and WRE is actively involved in this thinking. The counties of **Norfolk and Suffolk** are ambitious and innovative in terms of agri-food and other economic development, and water features prominently within New Anglia Local Enterprise Partnership's Local Industrial Strategy. The counties are home to some of our most iconic landscapes, including **The Broads** and many beautiful chalk stream habitats, and there is real tension in parts of the region between the need for water for the environment, public water supply and irrigated agriculture.

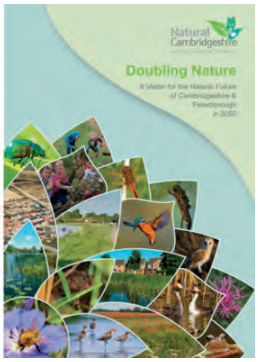
The county of **Essex** has a number of important reservoirs and is generally regarded as more resilient to public water supply scarcity due to planning work undertaken several decades ago, including the transfer of water from neighbouring counties. Nevertheless, there is strong housing growth and environmental ambition, but also a strong risk of flooding in certain parts of the county.

The tension between the need to protect precious chalk stream habitats from abstraction pressure and the desire for increased housing in places such as Cambridge are felt strongly in **Cambridgeshire**. There is an inequality in economic terms between the north and south of the county, with the north of the county being vulnerable to flooding associated with a changing climate. Cambridgeshire has joined others in our region in declaring a Climate Emergency, and managing water in a different way across the county could be pivotal in enabling growth and environmental enhancement.

And finally, in its response to the 2017 National Infrastructure Commission (NIC) report, the Government designated the **Oxford-Cambridge Arc** a key economic priority, affirmed its ambition for up to one million high-quality new homes across the Arc by 2050, committed to completing new transport infrastructure, and committed to achieving growth in the Arc while improving the environment for future generations. With approximately 70% of the Arc potentially sitting within the WRE region, enabling a resilient water supply will form a critical element of our planning work.



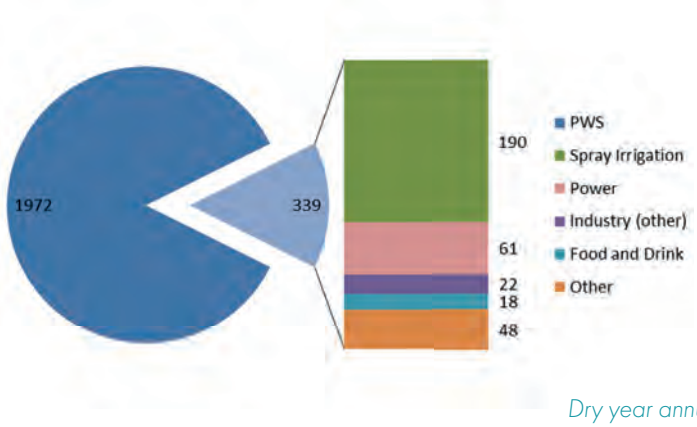




4. REGIONAL WATER RESOURCES NEEDS

BASELINE (2020/21):

On an average day, in a dry year, the total consumptive demand for water in the WRE region is equivalent to 2,311 million litres (megalitres) per day. Most of this water (85%) is used for public water supply (PWS). Most of the rest is used for spray irrigation (8%), power generation (3%) and in the manufacturing, food and drink sectors (2%). A breakdown in megalitres per day (Ml/d) is given below:



Dry year annual average demand (Ml/d) in the WRE region (data from water company Water Resource Management Plan (WRMP19) water resource planning (WRP) tables and from the Environment Agency)

Of the water put into supply by water companies, around 59% (1,100 Ml/d) is supplied by Anglian Water. Cambridge Water, Severn Trent Water and Essex and Suffolk Water supply 4% (84 Ml/d), 13% (250 Ml/d) and 23% (450 Ml/d) respectively while the remaining 1% (28 Ml/d) is supplied by Affinity Water:

Abstraction for spray irrigation occurs across the WRE region but is concentrated (71% in terms of licensed volume) in the Broadland, Cam and Ely Ouse (CamEO), East Suffolk, combined Essex and Witham and Steeping catchments. Spray irrigation is strongly seasonal and in a dry year it peaks in July at levels around 600 Ml/d. This is equivalent to approximately 30% of the average daily demand for public water supply.

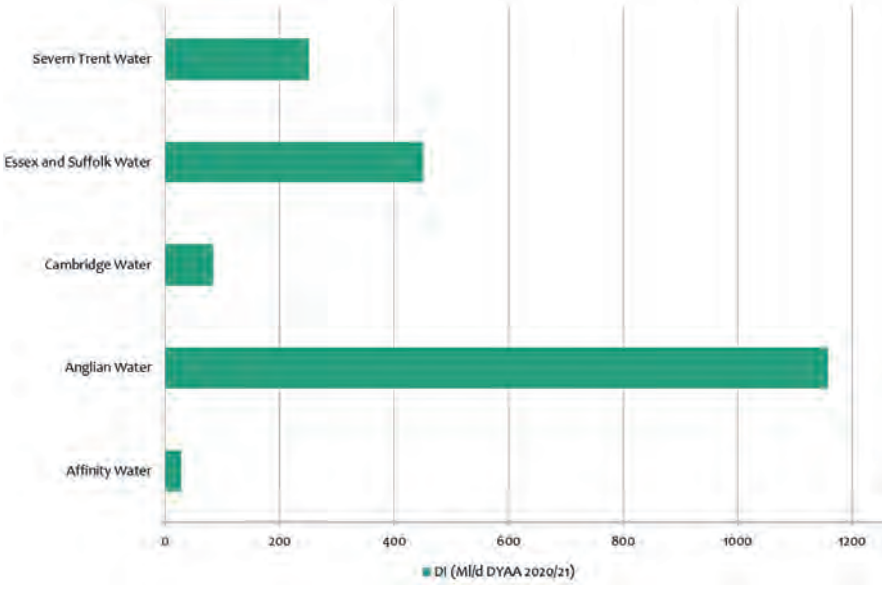
Abstraction for power generation occurs in the WRE region from the freshwater non-tidal sections of the River Trent and the River Ouse, from several coastal and estuarine locations, as well as from the tidal freshwater sections of the Trent and a number of the fenland rivers. The water is used for cooling and steam generation at coal and gas power stations.

The National Framework clearly summarises our challenge as follows:

WATER RESOURCES EAST

The East faces significant pressure and has little surplus water available. Evironment Agency modelling shows that the amount of water needed is equivalent to all the new supply options selected in the company Water Resource Management Plans – in this case Anglian Water, Essex and Suffolk Water, Affinity Water, Severn Trent Water and Cambridge Water – but more ambitious reductions in water use and potentially additional capacity is necessary to meet the higher need estimate. Water Resources East's focus will be on reducing the demand for water by all users and increasing the amount of water available through new water resource options and transfers. Exploring the potential for schemes that benefit other water users is also a priority given the high level of demand from other sectors in this region, particularly agriculture.

Environment Agency



Dry year annual average (DYAA) distribution input (Ml/d) for 2020/21. Severn Trent data based on Nottinghamshire, Newark and Rutland Resource Zones (RZs) and Affinity data based on Brett RZ. All data from water company WRMP19 WRP tables.

FUTURE NEEDS FOR PUBLIC WATER SUPPLY

Future needs in the public water supply sector are assessed every five years in water company Water Resource Management Plans (WRMPs). WRMPs for the period from 2020 onwards have just been published, and the summary supply-demand data from these is presented below. From this:

- The Affinity Water Brett resource zone (RZ) has an excess of supply over demand ("surplus") to 2050 (note: the published data does not account for significant uncertainty in the short to medium term in relation to the scale of potential future environmental requirements in the Brett RZ)
- All of the RZs in the Essex and Suffolk Water system have surpluses to 2050
- A large deficit is forecast in the Severn Trent Nottinghamshire RZ from 2020 onwards
- Most RZs in the Anglian Water system have a shortfall in supplies ("deficit") by 2050. A significant number of these are large (>10Ml/d)
- There is a forecasted deficit in the Cambridge Water supply area of 8Ml/d by 2050.

In total, there are RZ level surpluses equivalent to 107 Ml/d and RZ level deficits equivalent to -312 Ml/d by 2050. Overall there is a net deficit equivalent to just over -200 Ml/d.

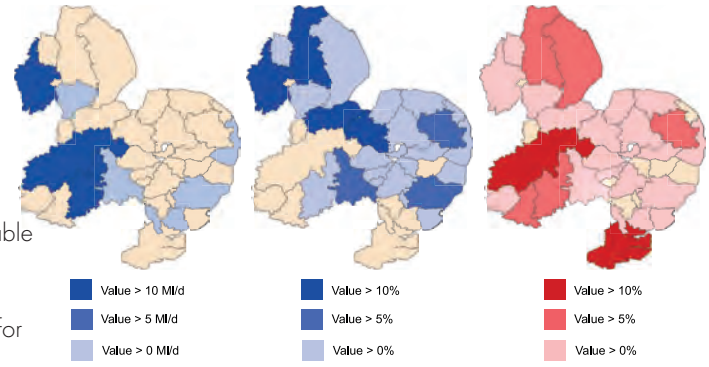
It is important to note that each water company WRMP sets out their plans to close any forecast deficit (see examples later), and the role of the Regional Plan will be to assess whether there is a more optimum way of closing any deficit, compared to the currently published plans.

Water Company	Resource Zone	2020-21	2029-30	2039-40	2049-50
Affinity Water	Brett	7	10	9	8
Anglian Water	Bourne	5	-2	-4	-4
	Bury Haverhill	1	-10	-10	-11
	Central Essex	0	0	-1	-1
	Central Lincolnshire	30	-2	-7	-12
	Cheveley	0	0	0	0
	East Lincolnshire	24	20	19	19
	East Suffolk	3	-5	-8	-9
	Ely	3	-2	-3	-4
	Happisburgh	1	-2	-3	-3
	Ixworth	0	-2	-2	-2
	Newmarket	4	-1	-1	-1
	North Fenland	6	2	2	2
	North Norfolk Coast	3	-1	-2	-2
	North Norfolk Rural	2	-4	-5	-6
	Norwich and the Broads	10	1	-1	-1
	Nottinghamshire	1	-2	-3	-4
	Ruthamford Central	0	0	0	0
	Ruthamford North	7	-19	-33	-45
	Ruthamford South	-21	-37	-47	-58
	Ruthamford West	0	0	0	0
	South Essex	0	-9	-13	-17
	South Fenland	4	-19	-19	-20
	South Humber Bank	11	11	11	11
	South Lincolnshire	5	3	2	1
	South Norfolk Rural	3	1	0	0
	Sudbury	3	2	1	1
	Thetford	0	-1	-2	-3
Essex & Suffolk Water	Blyth	3	3	3	3
	Essex	16	21	43	35
	Hartismere	1	1	1	1
	Northern Central	19	19	18	17
Severn Trent Water	Newark	7	7	7	7
	Nottinghamshire	1	-30	-86	-99
	Rutland	2	2	2	1
South Staffs Water	Cambridge supply area	1	-5	-6	-8
	Sum Surplus	183	103	119	107
	Sum Deficit	-21	-154	-256	-312
	Net Supply Demand Balance	163	-51	-136	-204

Dry year annual average (DYAA) Resource Zone (RZ) level supply-demand balances for water company's in the WRE region (Ml/d). Data from water company WRMP19 WRP tables. Surpluses shaded blue and deficits shaded red

The deficits which are projected to occur over the period to 2050 are driven by a combination of population growth, climate change and a reduction in levels of abstraction in environmentally sensitive areas (also known as "sustainability reductions"). Summary details are given below:

- Climate change impact on the volume of water which is available for abstraction and use from water company sources (WAFU): **-122 Ml/d**
- Sustainability reduction impacts on the volume of water which is available for abstraction and use from water company sources (WAFU): **-138 Ml/d**
- Impact of growth and new development on the total level of demand for public water supplies (distribution input – DI): **+159 Ml/d**



Distribution of climate change (blue - top left) sustainability reduction (blue - middle and growth (red - right) impacts on water company supply-demand balances. Shading indicates following:

- *No shading: no significant impact*
- *Light shading: 1% of total impact in this RZ*
- *Medium shading: 1% to 5% of total impact in this RZ*
- *Heavy shading: >10% of total impact in this RZ*

Data from water company WRMP19 WRP tables. Note that the sustainability reductions take no account of the longer term environmental ambition for our region, which are potentially significant, or further statutory reductions which may be required in AMP8 (from 2025-2030)

As detailed earlier, WRMPs also describe the measures that water companies will take to maintain the balance between supply and demand. In the WRMP19s, there is a strong commitment to demand management including measures to reduce leakage and levels of per capita consumption (PCC) and this is reflected in the WRMPs for the WRE companies. As well as this, the WRMPs for Anglian Water, Severn Trent Water and Cambridge Water also contain schemes to transfer surpluses resources into areas with deficits, build new, sustainable sources of supply, refurbish or upgrade existing sources and to continue with sustainability reduction investigations and options appraisals.

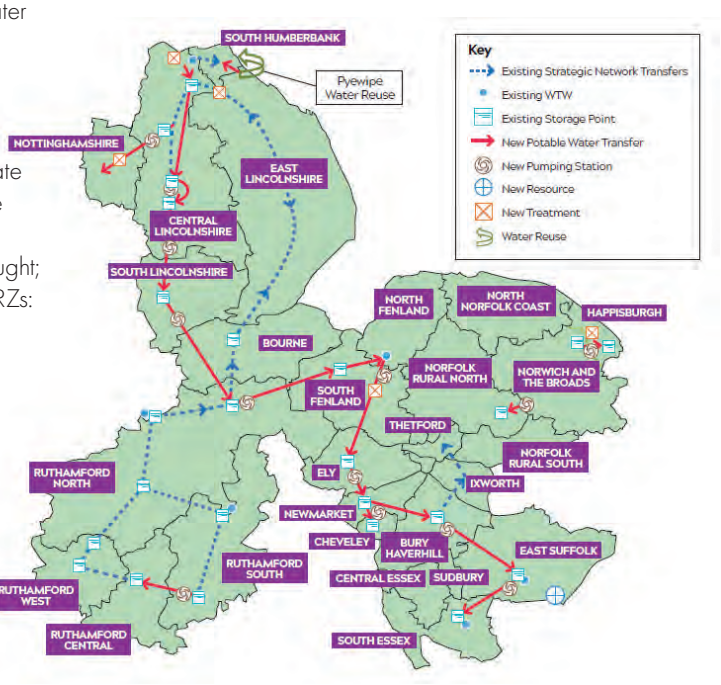
In a regional context, the key schemes are:

- Integration of the Nottinghamshire RZ into the Severn Trent Water strategic grid, and
- The development of a strategic north-south grid within the Anglian Water system.

In supply-demand planning for public water supply systems, measures to increase resilience are assessed by running water resource models using synthetic weather data. Outputs from this process are then used to calculate the water which is available for use (WAFU) in conditions which are more severe than those in the historic record. This approach has been used to assess the need for additional supplies in the WRE region in a severe drought; preliminary results indicate that 88 Ml/d will be needed in the following RZs:

- Ruthamford North: **43 Ml/d**
- Ruthamford South: **34 Ml/d**
- South Essex: **5 Ml/d**
- East Suffolk: **1 Ml/d**
- Cambridge: **5 Ml/d**

Differences with the drought resilience need assessment in the National Framework report (226 Ml/d in total) arise from the use of different methodologies. Work to reconcile the two approaches is on-going.



Anglian Water's proposal for a strategic north – south grid

FUTURE NEEDS FOR AGRICULTURE AND POWER

Although subject to significant uncertainty, over the period to 2050 there are likely to be changes in the power and agriculture sectors which could have profound implications for future levels of water demand in the WRE region.

POWER

To achieve UK net zero carbon, decarbonisation of gas and electricity systems in the UK will be needed. Future Energy Scenarios (FES) from National Grid show that this could drive significant growth in carbon capture use and storage (CCUS) and the hydrogen economy, both of which require significant volumes of water. For example, from the FES (2019) and the Committee for Climate Change (CCC) report "Hydrogen in a low carbon economy" (2018) illustrations of the scale of the potential need can be derived from the following:

- Water is needed to produce hydrogen either from electrolysis (0.5l H20 per Kilowatt Hours (KWh)) or gas-reforming (0.1l to 0.3l H2O per KWh). This is in addition to any water required for cooling purposes
- In maximum demand scenarios, hydrogen production could be equivalent to between 312 Terawatt Hours (TWh) (FES) and 700 TWh (CCC)
- Equivalent water demands vary between 85 Ml/d (312 TWh by low water demand gas reforming, excluding water for cooling) and 958 Ml/d (700 TWh by high water demand electrolysis)

The 2019 FES notes that rapid decarbonisation is most likely to lead to high levels of demand for hydrogen. The FES and CCC reports also suggest that future CCUS and hydrogen production activity will be concentrated in a small number of "industrial clusters", where suitable infrastructure exists and there are high energy demands. The Humber region, a significant part of which is in Eastern England, is identified as one of five possible cluster locations in the FES.

AGRICULTURE

The potential for future growth in water demands in agriculture was assessed by Cranfield University as part of their work on the initial WRE strategy prior to its publication in 2018. Based on the degree of globalisation in the sector and attitudes to sustainability, a range of different demand scenarios are plausible and each of these has a different growth factor. Details are summarised below:

Socio-economic Scenario	Growth Factor (2060)	Key features
Sustainable, Regionalisation (SR)	1.39	Low GDP growth (0.5% per annum) with prudent use of water and strong focus on the environment
Sustainable, Globalisation (SG)	2.04	Moderate GDP scenario (1.7% per annum) with prudent use of water balance between environmental and economic need
Uncontrolled demand, Regionalisation (UR)	2.52	Moderate GDP scenario (1.5% per annum) with imprudent use of water and strong focus on energy and agriculture
Uncontrolled demand, Globalisation (UG)	1.39	High GDP scenario (2.0% per annum) with imprudent use of water and public water supply remains main use for available water resources

Growth factors for agricultural demand in the WRE region. Data from Cranfield University report (2018)

Given base year demand equivalent to 190 Ml/d, dry year annual average (spray irrigation) demand in the 2050's could vary between 264 Ml/d and 478 Ml/d, an increase of between 74 Ml/d and 288 Ml/d. However, since spray irrigation is concentrated in the summer, peak daily demands could increase from around 600 Ml/d to between 800 Ml/d and 1,450 Ml/d.

The 'irrigation water strategy for UK agriculture and horticulture', published in 2020, defines irrigation hotspots and clearly shows that the highest intensity is in Eastern England.

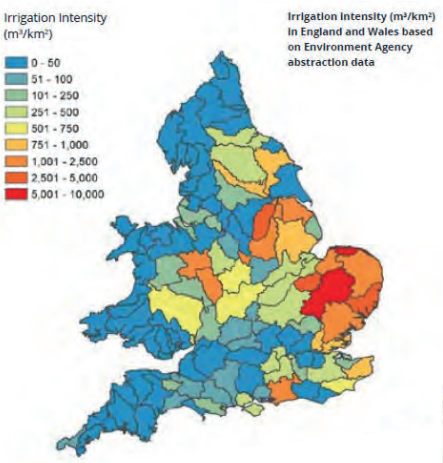


Figure taken from "Irrigation water strategy for UK agriculture and horticulture" by Knox, J.W., Kay, M.G., Holman, I.P., and Hess, T.M. (2020)

FUTURE NEEDS OF THE ENVIRONMENT

The Water Resources East region is the driest in England, receiving less rainfall than parts of Israel. The region is home to some of the most iconic landscapes and habitats, including a number of precious chalk streams, vast fens, the Lincolnshire Wolds and the Norfolk Broads. Many of these are internationally recognised. During droughts and other periods of water stress, rivers and wetlands can suffer damage which is then exacerbated by abstraction or other land and water management activities. In many cases, appropriate measures to protect and enhance the environment have been identified and implemented or are subject to on-going investigations from which schemes will emerge.

In the future, additional environmental needs are likely to arise from a combination of climate change, growth and action to deal with any residual abstraction related issues. The WRE Regional Plan may examine schemes which may previously have been regarded as uneconomic but in the context of the 25-Year Environment Plan and other policy initiatives, such as net zero carbon, become viable. Our overall level of "environmental ambition" will be a key factor in assessing a significant proportion of these needs and will be developed collaboratively with stakeholders across the region as we develop our Regional Plan.

THE IMPACT OF CLIMATE CHANGE

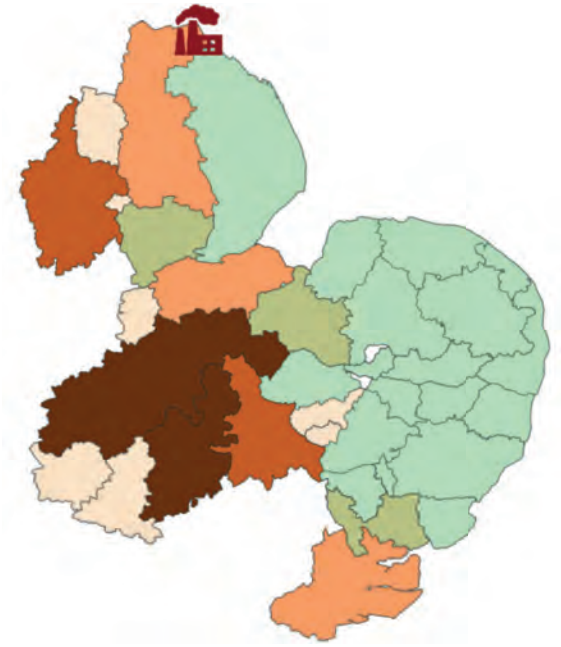
Climate change effects that may drive on-going investment include the following:

- Greater fluctuations in water levels and flows
- Warming temperatures, which may:
  - Threaten the persistence of some species
  - Extend the growing season for nuisance species, such as algae, or
  - Decrease oxygen concentrations in water
- Increase run-off, leading to increased nutrient levels in water bodies and an increase in sediment concentrations
- Drying of shallow water bodies, headwater steams and other marginal habitats, and
- Changes in connectivity of water bodies, which could increase during floods and decrease during droughts

UNCERTAINTY AND THE MANAGEMENT OF RISK

In terms of our current understanding:

- Future needs in the public water supply system are significant and likely to be greatest in the west of the region. Deficits in this area are driven by a combination of growth, climate change and sustainability reductions. These pressures are also be apparent in the south and east of our region, but to a lesser extent
- The agriculture sector is also likely to have significant water related needs in the 2050's, which will be driven by growth in irrigated agriculture mainly in the east of the region, and,
- There may also be significant growth in the water related needs of the power sector, as decarbonisation of gas and electricity systems drive an increase in carbon capture use and storage (CCUS) and hydrogen production. It appears likely that the focus for any such activity It appears likely that the focus for any such activity in our region could include the Humber South Bank and that these demands, if realised, will start to emerge from the early 2030's onwards.



Multi-sector needs in the WRE region in the 2050's.

Key:
Brown shading for PWS (dark brown for >10% total of supply and demand related need;
Mid-brown for >10% of supply or demand related need;
Light brown for 5% of supply or demand related need);
Green shading for spray irrigation needs (dark green where this overlaps with PWS needs) and power station symbol for power sector need related to decarbonisation.

Within this assessment, however, there is a degree of uncertainty about a number of critical planning factors and issues. As well as demand in the power and agriculture sectors, this includes for the future needs of the environment and our level of "environmental ambition", the possible need for exports to other regions, the effectiveness of planned demand management measures, the impact of climate change and severe drought on reservoir yields and deployable output, and future levels of population and property growth in the OxCam Arc. Summary details are given below:

Sector	Pressure	Dry Year Annual Average Estimated Impact (Ml/d)		Comment
		Lower	Upper	
Public Water Supply	Climate Change	54	180	Includes range of possible high/low climate change impacts - mostly on reservoir yields
	Sustainability Reductions	139	500	Upper limit accounts for indicative levels of enhanced environmental ambition
	Growth (population)	159	408	Upper limit accounts for maximum possible build-out rates in OxCam Arc and failure to make significant progress with planned demand management measures
	Drought resilience	88	88	Note: methodology uncertainties which are subject to work in progress
	Regional exports	(-)	(-)	Unknown at this stage, although 100 Ml/d export is currently assumed for work on the South Lincolnshire Reservoir scheme
Power	Decarbonisation	17	192	Assumes rapid transition to Hydrogen economy with 20% of the national production in WRE region
Agriculture	Growth (irrigation)	74	288	Based on range of plausible growth factors for spray irrigation in the WRE region
	Total	**531**	**1,656**	

Range of uncertainties arising from the initial assessment of need in the WRE region in the 2050's

Arising from this wide range of uncertainty, the potential exists for a series of sub-optimal outcomes. Driven by either under or over investment, these include low levels of affordability, a reduction in security of supply, a reduction in levels of service, increased competition for the available resources and widespread and persistent levels of environmental degradation. To manage these risks, more work is needed to understand the distribution, timing and size of our future needs. In particular, this includes for:

- Decarbonisation and power sector needs
- Drought resilience (the effect of 1/500 droughts)
- Regional exports (and imports)
- Environmental ambition, and
- Agricultural demands

Even upon the completion of this work there will remain a residual level of uncertainty. Given the time-scales over which we are planning and the issues we are planning for, this is likely to be significant. To manage the resulting risk we need to continue to use planning approaches such as Multi-Objective Robust Decision Making (MO-RDM), which are designed to help planners and others make better quality decisions in complex systems subject to significant uncertainty. We will also need to build our capacity for adaptive planning.

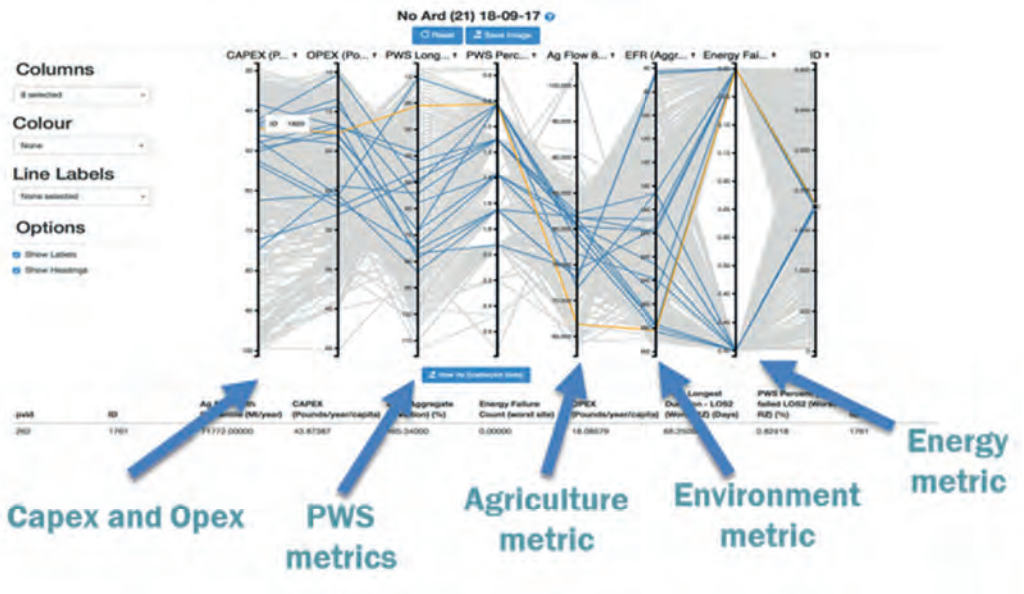
MAKING DECISIONS UNDER UNCERTAINTY.

Until recently, water resource planning in England and Wales was dominated by deterministic forecasts of the balance between supply and demand and least cost-optimisation. Used almost exclusively by water companies, the Environment Agency, and Ofwat, this approach identifies the most cost-effective way to maintain levels of service in a single planning scenario that combines environmental need with best estimates of the future impact of drought, climate change and population growth. Within this planning framework, risk and uncertainty are accounted for using a planning allowance known as 'Target Headroom'.

While this approach performs well for single sector planning where the supply-demand investment drivers are well understood, and for regions where the predominant use of water is for public water supply, they are less suitable for multi-sector planning or for planning where there is significant uncertainty about investment drivers and the related risks over the long term. Eastern England is different in terms of the amount of water which is used for other purposes, particularly irrigation and power and in the level of uncertainty moving forward into the 2050s, and so this approach has proved highly beneficial for WRE.

For Integrated Water Resource Management (IWRM) planning that takes account of the uncertainties and risks from many factors including climate change and growth, WRE uses a combination of decision making under uncertainty (DMUU) methods. These include many-objective evolutionary optimisation (MOEO) and robust decision making (RDM).

The MOEO-RDM approach (MO-RDM) allows the vulnerability of water resource systems to be quantified in terms of the impact of growth, climate change, and drought on abstractors from different sectors and the environment. The analysis is simulator based, with uncertainty accounted for using a wide range of plausible future scenarios, and vulnerability defined in terms of metrics and thresholds which are specified by each sector. Subsequently, MO-RDM identifies 'pareto-optimal' portfolios of schemes that are capable of meeting minimum performance thresholds over a wide range of plausible future scenarios. In these, performance in respect of one metric cannot be improved unless at the expense of another, therefore trade-offs between the portfolios must be used to select the one which best meets the overall needs of the planners. In this way, WRE can produce strategies and plans which simultaneously meet the needs of the public water supply, environment, energy and agri-food sectors.



In the last step of the MO-RDM process, the selected portfolio is rigorously stress tested and the vulnerability analysis updated. It is an adaptive process however, and where additional improvements are needed, alternative portfolios can be selected and tested and, if necessary, the process can be re-run based on new information that becomes available.

5. STRATEGIC CONTEXT AND IMPLICATIONS

The strategic context for WRE's first regional first regional water resource management plan includes the following:

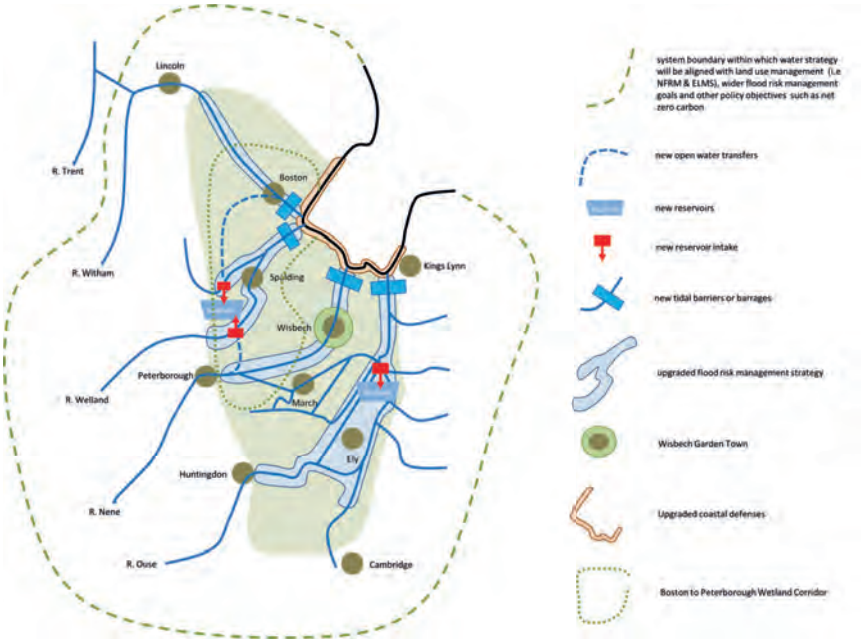
- Expected but uncertain impacts from climate change on drought and flood risk. Arising from a combination of warmer wetter winters and hotter drier summers, these are likely to be significant and to include the threat of coastal inundation in large parts of the WRE region as a consequence of sea-level rise.
- Net zero carbon by 2050, and
- The need to increase levels of growth following our departure from the European Union. This includes delivering on the clean growth agenda which is set out in the Governments Industrial Strategy and "levelling-up" of disadvantaged communities and areas.

Within the WRE region, more effective integrated water management is absolutely pivotal to meeting these challenges. Securing economic growth and the related benefits for our communities and the environment means that we will have to meet growth in demand and increase resilience to flood, coastal inundation and drought. Achieving net zero carbon will require more efficient use of our available resources and may require us to provide a large volume of additional supply to the energy industry for carbon capture use and storage (CCUS) and the hydrogen economy.

With the potential for large investment needs in each sector, cost will become a key driver for decision-makers. To maintain levels of affordability, measures to further strengthen cross-sector collaboration are necessary, specifically in relation to the development and funding of new infrastructure. Some of this will be relevant for regional strategic issues; other for more local sub-regional or catchment-based issues. Developing single sector (or single company) solutions for meeting future water related needs in the WRE region, as well as managing the related uncertainties and risks, is unlikely to be cost-effective. A more integrated, holistic, approach is needed.

CASE STUDY; THE FUTURE FENLAND ADAPTATION STRATEGY

An example of where WRE is strengthening collaboration between sectors is the Future Fenland Adaptation Strategy. This initiative, which is based on the principles of Integrated Water Resource Management (IWRM), seeks to deliver a long-term solution to the drought, coastal inundation and flooding related risks which are posed in our fenland areas by climate change. By coordinating activity and funding in programmes which are traditionally considered to be separate, the overall level of investment which is required can be reduced, and delivery can be made more efficient and the benefits spread more widely. An illustration of the concept is given below:



Key elements of the Future Fenland Adaptation Strategy include:

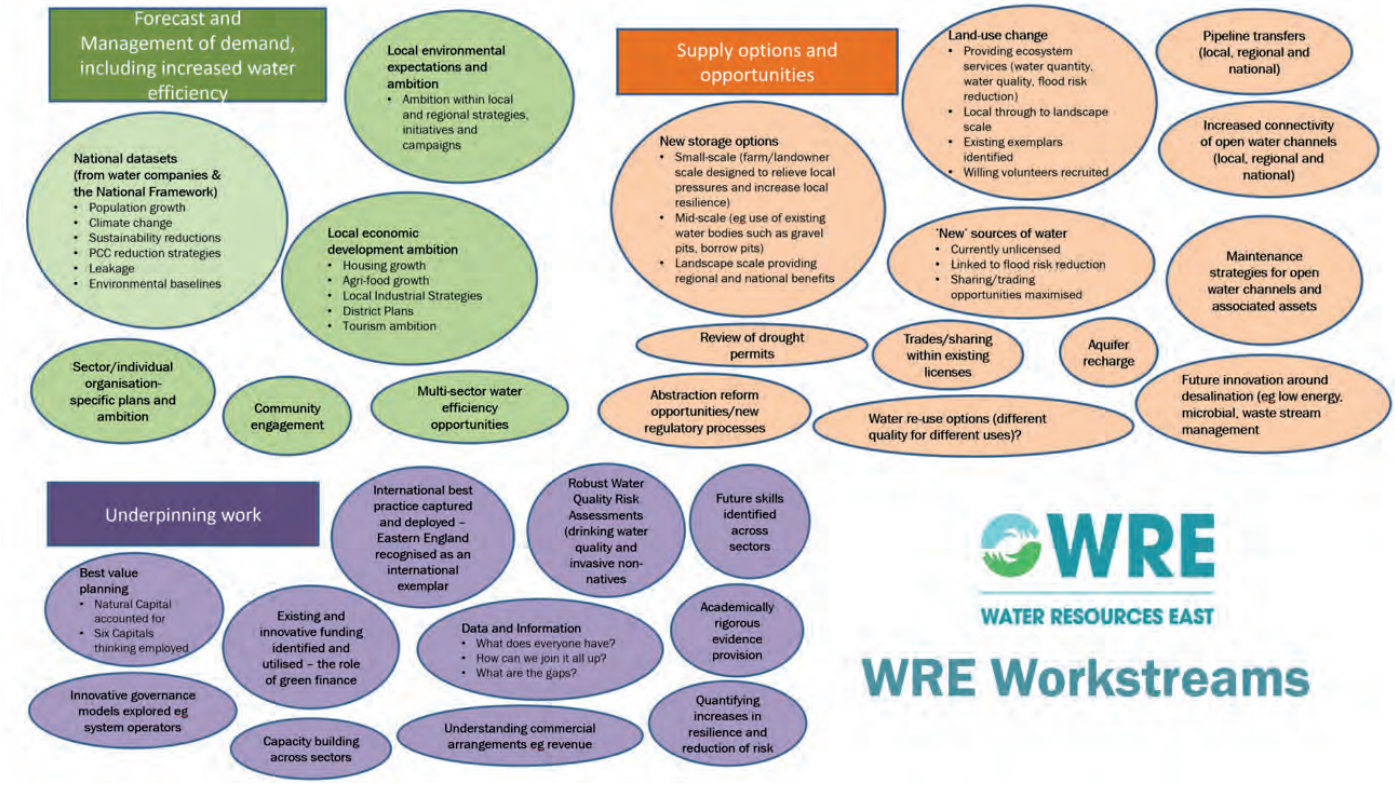
- New multi-sector reservoirs providing additional water supply resilience for water companies, farmers and the food industry.
- Downstream flood barriers or barrages to protect growth areas in the Fens, enabling key local infrastructure projects such as such as a rail connection from Wishbech to Cambridge and the dualling of the A47 to move forward.
- Open water channels to provide water storage, biodiversity, navigation and tourism, and further flood risk management benefits.
- The opportunity to collaborate to manage land and water across the Fens in a new and integrated way, seeking to secure the future of the peat landscape given its crucial role in carbon sequestration.

6. OUR APPROACH TO REGIONAL PLANNING

At WRE, building on the multi-sector approach which has continued to mature over the last five years, we are pursuing an ambitious regional planning approach focussed on:

- Forecast and management of demand, including increased water efficiency.
- Supply options and opportunities.
- Underpinning work.

The myriad of workstreams and initiatives which sit below each of these headings are summarised below:



Many of these workstreams are outside of 'traditional' water company-only water resource management planning, and as such we are seeking to supplement the funding being provided by our water companies and our Board of Directors with external grants, working in partnership with other organisations in our region.

We have a detailed draft Technical Programme which will run through until the publication of our Regional Plan; this will ensure that the outputs of our work can be directly incorporated into water company Water Resource Management Plans ready for their publication in 2023. We will publish our full Technical Programme and further details of all of our workstreams in our 3 Year Business Plan in May 2020, and will publish detailed Method Statements in July 2020.

The technical programme will be coordinated via a multi-sector Technical Delivery Group and a series of task and finish groups, supporting more local, sub regional, planning.

It is our intention that the WRE Regional Plan will contain schemes and solutions which will be funded outside of the water company WRMP process, or co-funded via other routes as we develop 'best value' options for the many water users in our region.

7. CO-CREATION OF THE REGIONAL PLAN

The overall 'ethos' of WRE's Regional Plan Development will be one of co-creation and engagement, rather than creation and consultation.

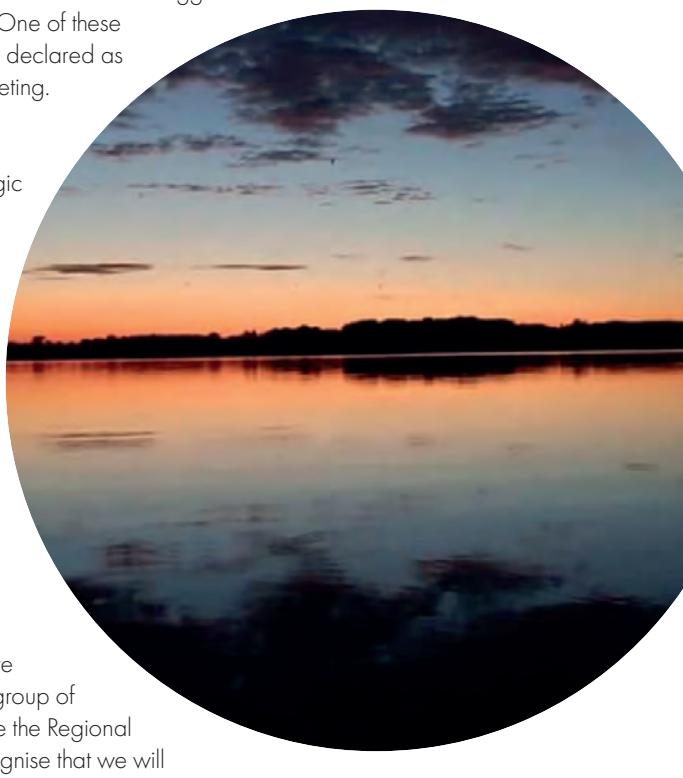
We will co-ordinate the outputs of the sub-Regional Planning processes and the associated working groups via a series of Planning Conferences for stakeholders in each area. This will enable us to discuss the range of proposed solutions for each group, to understand challenges and opportunities and to seek consensus on the portfolio of options which will go forward into the next stage of planning processes.

We will also direct stakeholders with suggestions for options or schemes to each water company Upstream Market process.

In line with the other regional groups, the sort of questions we will ask throughout the process are:

- Do you think we have we missed any key water users within the region? If so can you please provide details of these water users and the sectors they may be in?
- Are there any further key challenges and opportunities we face in the region with regard to water resource availability that you believe we should consider?
- We have set out our first thoughts on environmental ambition. Are we focusing on the key opportunities in our region? Are there any other areas of opportunity you think we could benefit from?
- What are your views on how the region could or should use temporary approaches, such as drought permits, to managing continuous water availability in drought events?
- This plan requires engagement across a wide range of stakeholders. What are your views on how best to achieve this and are there any key stakeholders you suggest the plan engages with?
- What are your suggestion on further options we could consider?

We will hold quarterly meetings with our entire membership, our Strategic Advisory Group, together with our Consultation Group (regulators and other government agencies). The purpose of these meetings will be to engage our membership in the emerging plan, to identify any concerns or opportunities as early as possible and to gather feedback and suggestions throughout the process. One of these meetings will formally be declared as our Annual General Meeting.



In between Planning Conferences and Strategic Advisory Group and Consultation Group meetings, we will continue to engage on an individual basis with organisations and will attend and support other organisations' Working Groups, Steering Groups and meetings across the region as required.

Whilst we will collaborate with a diverse, inclusive group of stakeholders to co-create the Regional Plan, we absolutely recognise that we will need to undertake specific targeted engagement with for example water company customers, water company Customer Challenge Groups and individual Company Boards (water company and others). A detailed engagement plan will be developed during 2020 to align with all key milestones within the National Framework.

If you would like to feed into our plan or have any comments on the above, please contact us at contact@wre.org.uk. Stakeholders can also interact with us via our two social media channels. Follow us on Twitter @WaterREast and on our LinkedIn page.

OUR MEMBERS

At the time of writing WRE has almost 70 members across many sectors

Water Companies

Energy Companies

Landowners, Farming & Abstractor Groups

Environmental Organisations

Internal Drainage Boards & Other Public Bodies

Community & Advocacy Groups

University and Education

Business

Local Authorities & Local Enterprise Partnerships

Our Consultation Group

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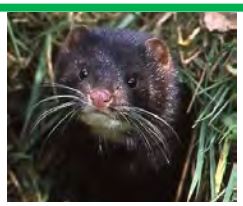


NORFOLK MINK PROJECT

Annual Newsletter 7, January – December 2019

*** Website https://thenorfolkminkproject.org.uk/ ***

Norfolk Non-native Species Initiative

* Our website is now regularly used by the public to report sightings *

2019 STATISTICS

Total Mink Caught	78
Rafts Deployed	465
Traps on Loan	449
Volunteers Involved	305

It has been another busy year for the project and, although the number of mink caught has gone back up again compared to last year (50), we still have far fewer mink in the county than when the project started. However, an increase always leaves me wondering if we missed a number last year or are we improving our control? The answer is likely to be, a bit of both! Some of the increase is due to the project now having more resource in the far west of the county, with new areas being trapped, and also an improvement in efficiency through the increased use of automated trap monitoring devices. Also, at our current level of control, we miss some mink each year that will go on to breed and there is a degree of immigration.

To protect our wildlife from mink we have two options, either continue with control indefinitely or, if it is feasible, to try and eradicate them. Eradication completely removes the threat to native species and will be much less costly in the long term, but is it possible? For a number of reasons we believe that the time is now right to go for eradication and this is set out in more detail later. But first we should look at what we achieved together in 2019.

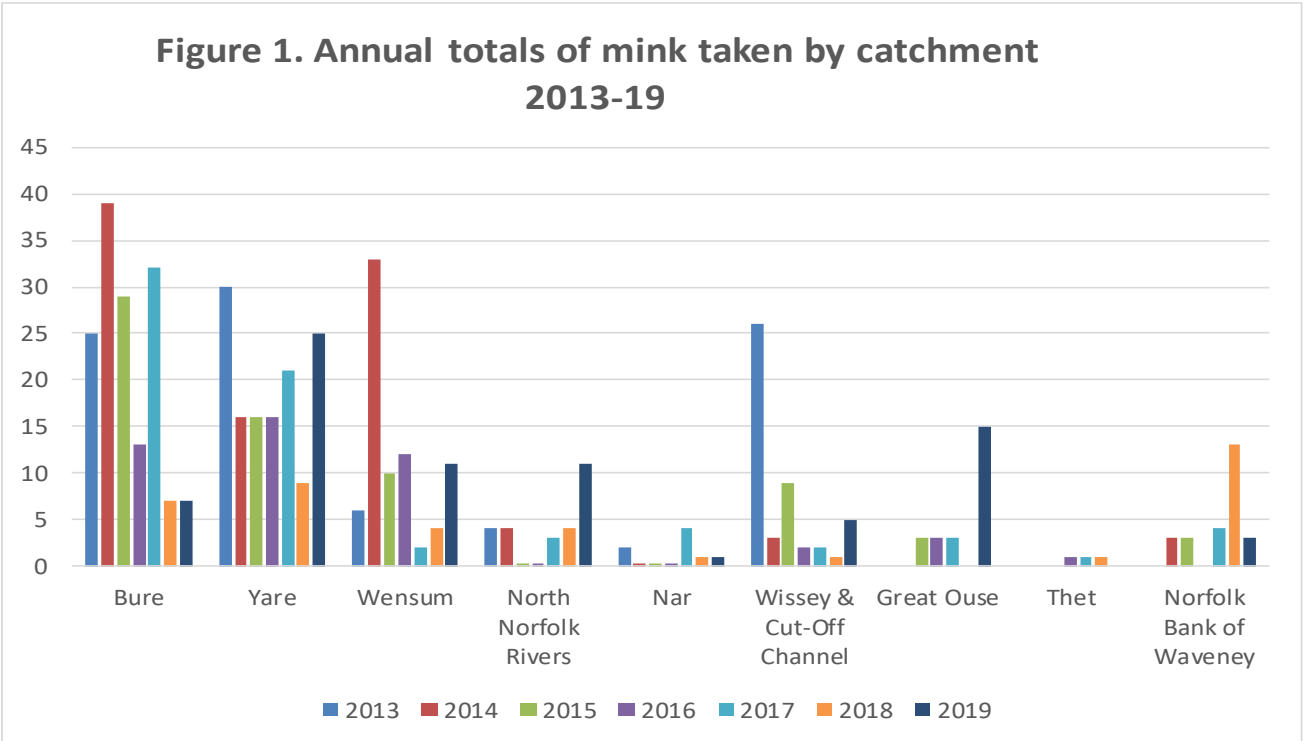


Figure 1 shows that it is the Yare, Great Ouse, North Norfolk and Wensum where the number of mink caught have gone up over the past year. This is shown graphically in Figure 2 with clear 'hotspots' to the very west of the county around the confluence of the Great Ouse and the Wissey, along the Glaven in North Norfolk and in the middle reaches of the Yare.

Figure 2. Number of mink events (captures, sightings, field sign etc) per tetrad in 2019

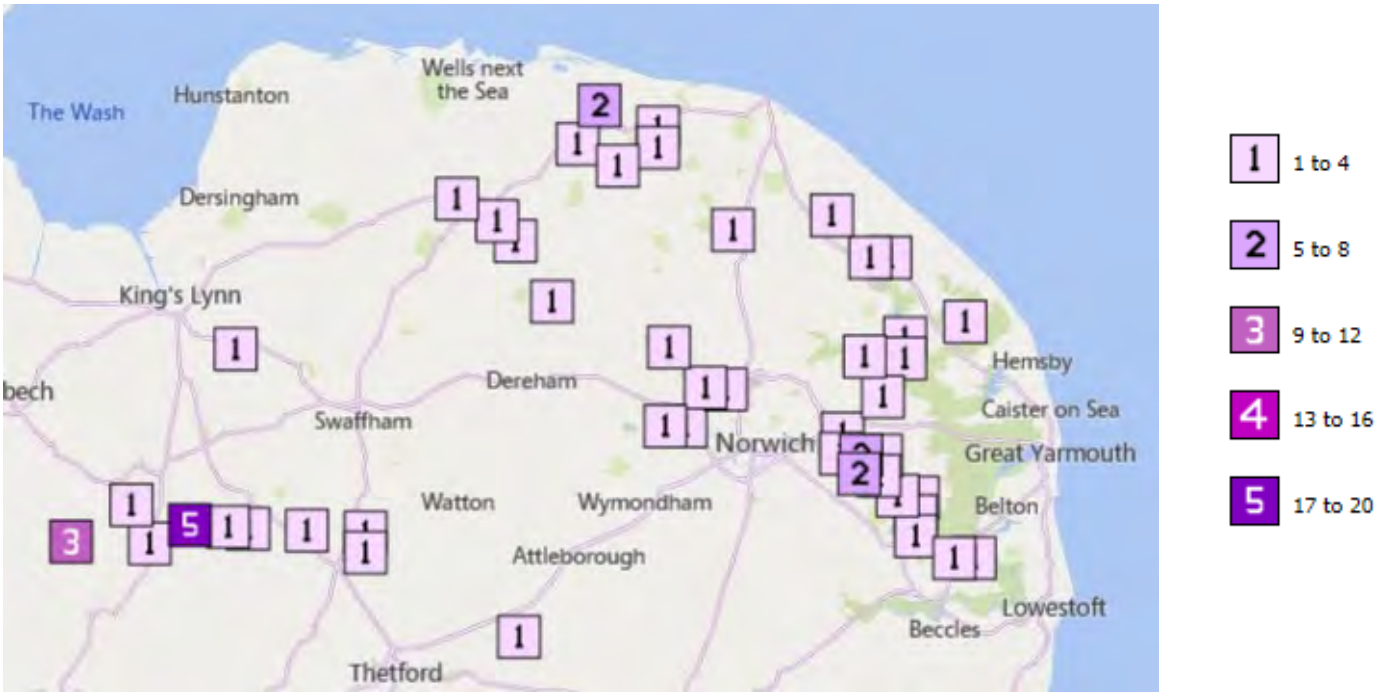


Figure 3 shows the distribution of mink rafts in Norfolk in 2020, although we recognise that not all of them will be active all the time. In addition there are over 100 sites which also have traps available to be set on the bank but are not shown this year as there is only so much you can fit on a map at this scale.

Figure 3

Raft positions current at some point in 2019

CATCHMENT REPORTS FROM OUR CO-ORDINATORS

BURE, YARE & THET — **Stephen Mace**

07920 522054 macey@stephenmace.co.uk

MINK CAUGHT & STATUS 2019		
Number caught in previous year ( )	**Bure**	**7** (7)
	Yare	**25** (9)
	Thet	**0** (1)

Bure

Numbers in the Bure remain low for a second successive year, only 7 caught in total. Most of these were caught in the broads area again, around Hickling and Horning. However we did have some sightings at Ingworth on the Bure and footprints by the Dilham Canal between North Walsham and Swafield, where we didn't catch. There could be mink in these area's during 2020 for us to watch out for. With the numbers being so low for the last two years it shows the great work and effort that everyone is putting in.

Yare

We have seen a sharp increase in numbers in the Yare for 2019, going from 9 in 2018 to 25 caught in 2019, back to roughly where we were previously. The bulk of the mink caught were between Norton Subcourse and Strumpshaw with a few sightings in the Brundall area. We were helped by some funding we were able to get from the Water, Mills and Marshes project that enabled us to purchase some extra equipment, including remote trap monitoring devices. With this equipment we caught 13 mink along that stretch of the river; I'm sure without it we wouldn't have caught nearly as many in this area and next year we would have had an even bigger problem. The mink included the silver coloured one shown on the left, caught at Hardley. Thank you to everyone for all the hard work this year, hopefully with the new equipment in place we can start to get on top of them here.

Thet

The Thet is very quiet at the moment with no mink caught in 2019, and with only the one sighting near East Harling which sadly eluded us. I do expect there are a few mink roaming around, however in very small numbers. I'm looking for more landowners who may be willing to help out and monitor a raft, if you may know of anyone please pass on my details.

North Norfolk Rivers
GT. OUSE & NAR

Rory Hart
07950 555279 roryhart@ymail.com

MINK CAUGHT & STATUS 2018			
Number caught in previous year ( )	**North Norfolk**	**11** (4)	
	Great Ouse	**15** (0)	
	Nar	**1** (1)	

North Norfolk Rivers

The spring and summer of 2019 were quite busy with a number of reports, including several sightings. We had a total of 9 mink trapped over the area as a whole plus reports of two mink killed on the road. As in previous years, the Glaven was where most were caught. We have also had reports from other rivers and the number of volunteers using project equipment has grown in several catchments. The Norfolk Rivers Restoration project have been extremely supportive by making landowners and managers aware of the Mink Project, leading to an increase of effort on the river Babbingley.

Trail cameras are continuing to be a great asset in positively identifying species. On one occasion a household with a very small, (dustbin lid size) raised pond saw a 'mink' in the garden. The fish in the pond were protected by a mesh net and trail camera footage showed in great detail an adult otter.

Great Ouse

There has been a marked increase in reports of mink activity on the river, it's network of tributaries and drains. Fourteen mink were trapped and another individual shot during 2019. It is encouraging that trapping effort has been so successful but clearly concerning that so many animals are present in the first place. The use of automated trap monitoring devices (mainly 'Remoti') has been very successful. The remote devices allow continuous trapping effort and constant reporting, vastly reducing the time spent in trap checking required each day. A further advantage is that more difficult to reach sites can be trapped making coverage of an area more robust. The increased success of the project in the extreme west of the county has very largely been down to the efforts of professional scientists who live locally who have engaged and encouraged volunteers and sourced additional equipment. This has led to the development of an active group in the area all using rafts fitted with 'Remoti', which should start to address the problem of mink in the catchment. Any assistance to increase the presence of volunteers would be greatly appreciated.

Nar

Captures and sighting of mink in this area continues to be low, only a single animal was taken in 2019. This is an encouraging situation, however as with the Great Ouse, I am not complacent and think that under recording is more probable than an absence of mink. The Nar appears to have all the habitat requirements that would support a breeding population, especially in the old gravel workings. We are planning to place a number of automatic reporting traps on the catchment in 2020. The aims are to increase the presence of the project on the river and also to try and identify areas where mink have been overlooked, as has been the case on the Great Ouse.

WENSUM AND WISSEY

Paul Gambling
07899 756107 wildlife@paulgambling.com

MINK KILL & STATUS 2018		
Number caught in previous year ( )	Wensum	11 (4)
	Wissey	5 (1)

Wensum

This year has seen a sudden rise in mink numbers caught compared with 2018, all bar one on the middle to lower reaches of the river from North Elmham to Hellesdon. Over half of these were bagged by one highly experienced and dedicated trapper. Many thanks, Colin, brilliant effort. The other captures were the result of patience and dedication by a small number of trappers and many thanks go to them. Another mink failed to dodge the traffic at North Elmham. The unexpected rise does make one suspect that there may still be mink in pockets along the main river and tributaries where there are no volunteers or rafts to monitor, or that they are entering the catchment from bordering areas. With fewer people monitoring over the last couple of years, it's impossible to tell which. So, if you do know anyone who might be interested in starting monitoring or resuming again, please do let me know. Good news is that there do seem to be fewer mink in the upper reaches, from the source of the Wensum to North Elmham, just one occurrence of footprints on a raft and one capture.

Wissey

Mink are still present on the middle and lower Wissey from STANTA to Hilgay and beyond to the River Great Ouse. There were slightly fewer field signs in 2019 than in 2018, but several more captures. They were all caught at the same small area in August-September, when the juveniles disperse, and comprised 3 juveniles, 1 adult female, and 1 unidentified. So, it's very likely that all the captures were from the same family of mink and possible that the adult female was the mother. Curiously, since male mink take no part in the rearing of young, large footprints were found on a site very close by at about the same time, so there may have been a male in the area too. All captures were at an important water vole colony, and prevented a catastrophe there. This was only possible through vigilance, monitoring the mink rafts regularly, and the use of remote trap monitoring devices, without which the long term trapping required would not have been possible.

Very good news: The Lower Wissey Facilitation Group has, via Natural England funding and help from Tony Martin who is driving the mink elimination project, acquired 10 rafts with double tunnels and traps. They have been equipped with Remoti mink trap monitors. This significantly increases the number of rafts and traps operating near the junction of the Wissey and Great Ouse. Trapping mink in this area before they can travel up the Wissey is essential to limiting migration into the Wissey catchment.

WAVENY AND LITTLE OUSE

Penny Hemphill
01473 890089 pennyhemphill@suffolkwildlifetrust.org
Stephen Mace (Norfolk bank of Waveny)
07920 522054 macey@stephenmace.co.uk

MINK CAUGHT & STATUS 2018			
Number caught in previous year ( )	**Waveney**	**39** (43)	🔴
	Little Ouse	**11** (21)	🟡

Waveney

The Suffolk project does the majority of trapping in our southern boundary catchments. Suffolk has seen the number of mink taken in the county increase to 112 in 2019. The majority of these have been from the two large rivers bounding the county to the north and south, the Waveney and the Stour. One site on the Waveney was particularly prolific, with half of the catchment total taken at one bankside trapping site, where mink were crossing from the main river into a Wildlife Trust Reserve.

The Norfolk part of the catchment has been relatively quiet this year with only 3 mink caught and all of these were at Haddiscoe. Some new equipment has also gone with the help of the funding provided by the Water, Mills and Marshes project, meaning we now have a few traps in place permanently, which have remote monitoring devices on them. If anyone knows of any landowners who might be interested in joining the project please pass on my (Stephen) contact information.

Little Ouse

The numbers taken have halved this year, hopefully we can keep the population down!

Male or Female?

Knowing the sex of mink that are caught is extremely helpful, especially as the population declines. When trying to control any population, it is the females that are particularly important and knowing where they are most likely to be found can make control more effective. A quick refresher might therefore be helpful. There is clearly a big size difference be-

tween the sexes, with adult males (900g—2kg) around twice the size of adult females (550g-850g). However juvenile males clearly overlap with adult females in weight and to be sure of the sex, it is best to look at the genital region. Here, as shown above, there is a substantially greater distance between the urinary tract and anus in males than females. Please check the sex of any mink carefully and let your Co-ordinator know when you report a capture.

GENOTYPING

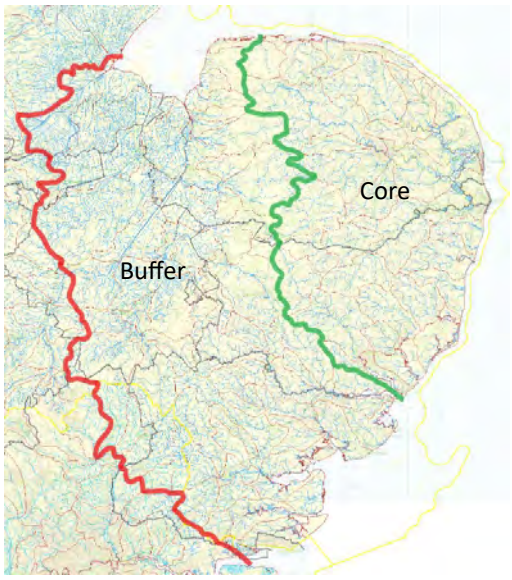
Have you ever wondered if a mink you caught was related to one caught previously or how far it may have travelled? Thanks to a kind free offer from Professor Bill Amos at Cambridge University we can now look at the genotype of all mink caught and sampled and tell, mother, father and siblings. This also potentially tells us a lot about the dispersal of animals from where they are born, as well as how they are related, and who we might not yet have caught!

We just need a small sample of skin to send to Bill, ideally the tip of an ear. These are ideally stored in alcohol filled tubes designed for the purpose. Your Co-ordinator will be pleased to come out and take a sample from a mink you have dispatched or you can take a sample yourself and keep it in a plastic bag in the freezer until a Co-ordinator can collect it. If you are likely to catch a few mink then we can leave you a few sample tubes in which to collect the samples yourself. We would ideally like to take a sample from all mink caught, to better understand what is going on with the population, so please contact your Co-ordinator as soon as you catch a mink, to arrange to get a sample collected.

WATERLIFE RECOVERY EAST: MINK FREE EAST ANGLIA

The last Newsletter included a piece about starting a pilot study to look at the feasibility of completely eradicating mink from a large area in England to help protect our wildlife. This has now progressed significantly and, following a well attended open meeting at the BTO in Thetford, a project entitled Waterlife Recovery East (WRE) has been started. This has a Steering Group representing the main groups involved with mink control in East Anglia (including ourselves) along with conservation, academic, fishing and shooting representatives.

The group has a clear agreed vision of how we need to proceed. In this, there would be a Core area, where the objective would be the complete elimination of mink and a surrounding 60 km deep Buffer area, trapped at the same intensity as the Core. The Core is likely to be the eastern two thirds of Norfolk plus north eastern part Suffolk and the Buffer area would include the remainder of Norfolk, Suffolk, Essex, Cambridgeshire and some small parts of adjoining counties. This recognises that there will be immigration from outside the Buffer area so some mink will always be caught in this area but hopefully none will make it to the Core.



What makes this feasible now is a number of new innovations becoming available, such as automated trap monitoring devices (e.g. *Remoti*), which let the trapper know when something has been caught, avoiding the need to physically check the trap daily. To comply with trapping legislation the device sends daily 'heartbeat' messages to your mobile to let you know the device is working properly, the trap has not been tripped, and nothing has been caught that you have not been alerted to. Another innovation is the ability, as described above, to read mink genotypes which, at low population levels, allow us to understand where any mink caught might have come from and who they are related to.

The Norfolk Mink Project and similar projects in other counties in the project area would continue as individual entities but co-operate to achieve the overall objective. The WRE Project will co-ordinate the overall strategy and seek the additional substantial funding that will be needed to move from the good level of control that we already have, to eradication; a significantly greater challenge!

ADDITIONAL SUPPORT THIS YEAR

We manage to run the whole project on about £15,000 a year, provided by contributions from our key financial backers: Norfolk County Council, the Water Management Alliance (the IDBs), the Environment Agency and the Broads Authority. We are enormously grateful for this ongoing support but this year we were fortunate to obtain a grant of nearly £5,000 from the Water, Mills and Marshes Project to put an additional 12 rafts, equipped with automated trapping devices, out in Broadland. We also received 12 *Remoti* devices from Natural England to support our work and also encouragement from their Chief Scientist.

We received a kind donation that allowed us to purchase 2 further *Remoti* to help make our trapping even more effective. *If you are able to help with a donation (£100 will purchase a Remoti) please do contact your Co-ordinator who will be more than willing to help!*

AND FINALLY

Joe Kenworthy who had been our contact at County Hall and the representative for the Lead Partner in the Project, has moved to a new job and we await his successor. In the interim Martin Horlock is covering as our representative. Joe did a great job while he was with us and we wish him well for the future.

The impact of the Coronavirus pandemic will eventually reduce but just a reminder that in the meantime please follow government guidelines if you are able to continue monitoring / trapping. If you cannot continue, please ensure that no traps are left set and ideally move rafts from the water to safe storage.

As always, from all of us involved with managing, financing and co-ordinating our Project, a huge thank you to all our volunteers.

Simon Baker

Chair of the Steering Group and editor of the Newsletter

Norfolk Rivers Drainage Board

From: 01 April 2020 **Period To:** 3
To: 30 June 2020 **Year Ended:** 31 March 2021

NOTES	INCOME AND EXPENDITURE ACCOUNT	Y-T-D BUDGET £	Y-T-D ACTUAL £	Y-T-D VARIANCE £	ANNUAL BUDGET £	PROJECTED OUT-TURN £	PROJECTED VARIANCE £
	Income						
	Occupiers Drainage Rates	83,223	83,223	0	83,223	83,223	0
1	Special Levies issued by the Board	322,428	322,428	0	322,428	322,428	0
2	Highland Water Contributions from EA	93,821	0	-93,821	93,821	93,821	0
	Grants Applied	5,000	2,592	-2,408	20,000	17,592	-2,408
3	Income from Rechargeable Works	750	1,485	735	3,000	1,485	-1,515
	Investment Interest	0	0	0	0	0	0
	Development Contributions	0	0	0	0	0	0
5	Other Income	57,870	34,727	-23,143	231,478	208,336	-23,142
	Total Income	**£563,092**	**£444,455**	**-£118,637**	**£753,950**	**£726,885**	**-£27,065**
	Less Expenditure						
6	Capital Works	5,000	2,592	2,408	20,000	17,592	2,408
7	Precept Contributions to EA	74,874	74,854	20	74,874	74,854	20
8	Maintenance Works	139,557	150,051	-10,494	558,227	568,721	-10,494
	Development Expenditure	0	0	0	0	0	0
9	Administration Charges	41,137	47,186	-6,049	164,547	170,597	-6,050
3	Cost of Rechargeable Works	0	1,445	-1,445	0	1,445	-1,445
4	Net Deficit/(Surplus) on Operating Accounts	0	-4,318	4,318	0	0	0
	Total Expenditure	**£260,568**	**£271,809**	**-£11,242**	**£817,648**	**£833,209**	**-£15,561**
	Profit/(Loss) on disposal of Fixed Assets	£0	£0	£0	£0	£0	£0
	Net Surplus/(Deficit)	**£302,524**	**£172,646**	**-£129,878**	**-£63,698**	**-£106,324**	**-£42,626**

Norfolk Rivers Drainage Board

From:	**01 April 2020**	**Period To:**	**3**
To:	**30 June 2020**	**Year Ended:**	**31 March 2021**

NOTES	BALANCE SHEET AS AT 30-6-2020	OPENING BALANCE £	MOVEMENT THIS YEAR £	CLOSING BALANCE £
10	**Fixed Assets**			
	Land and Buildings	37,962	-250	37,712
	Plant and Equipment	13,163	-899	12,264
	Shared Consortium Assets	0	0	0
		51,125	**-1,149**	**49,976**
	Current Assets			
11	Bank Account	326,668	135,361	462,029
12	Trade Debtors	68,073	-67,603	470
13	Work in Progress	19,326	31,687	51,013
14	Term Deposits	500,000	0	500,000
15,16	Drainage Ratepayers and Special Levies Due	-150	166,498	166,349
	Prepayments	0	0	0
17	Prepayments to WMA	-4,889	-23,352	-28,241
	VAT Due	1,587	9,039	10,626
	Grants Due	0	0	0
		910,615	**251,631**	**1,162,245**
	Less Current Liabilities			
	Trade Creditors	5,583	84,088	89,671
	Accruals	37,468	-2,000	35,468
	Payments Received In Advance	17,217	-1,661	15,556
	Finance Leases	0	0	0
	Payroll Controls	0	0	0
		60,268	**80,427**	**140,695**
	Net Current Assets	**850,347**	**171,204**	**1,021,551**
	Less Long Term Liabilities			
19	Pension Liability	96,000	0	96,000
	Net Assets	**£805,473**	**£170,054**	**£975,527**
20	**Reserves**			
	Earmarked			
	General Reserve	549,985	172,646	722,631
18	Grants Reserve	35,494	-2,592	32,902
21	Development Reserve	210,035	0	210,035
22	Plant Reserve	65,000	0	65,000
		860,514	**170,054**	**1,030,568**
	Non-Distributable			
23	Revaluation Reserve	40,959	0	40,959
19	Pension Reserve	-96,000	0	-96,000
		-55,041	**0**	**-55,041**
	Total Reserves	**£805,473**	**£170,054**	**£975,527**

P J CAMAMILE MA FCIS
CHIEF EXECUTIVE

S JEFFREY BSc (Hons) FCCA
FINANCE & RATING MANAGER

Norfolk Rivers Drainage Board

From:	**01 April 2020**	**Period To:**	**3**
To:	**30 June 2020**	**Year Ended:**	**31 March 2021**

Note **Notes to the Accounts**

1 Special Levies due from constituent Billing Authorities are as follows:

	Y-T-D BUDGET	Y-T-D 2020/21
Breckland District Council	51,625	51,625
Broadland District Council	77,088	77,088
King's Lynn and West Norfolk Borough Council	19,608	19,608
North Norfolk District Council	102,871	102,871
Norwich City Council	5,756	5,756
South Norfolk District Council	65,480	65,480
	322,428	**322,428**

2 The EA Highland Water Claim for 2020/21 is due to be paid by the Environment Agency (EA) to the Board in September, following the changes made to the timetable in 2015 (previously the payment was made in two installments - one in May and one in December).

3 Rechargeable work includes professional supervision and contracting services to the Broads and East Suffolk IDBs.

4 Net Deficit/(Surplus) on Operating Accounts is made up as follows:

	Y-T-D BUDGET	Y-T-D 2020/21
Labour Operations Account	0	-2,840
Mobile Plant Operations Account	0	-1,478
	0	**-4,318**

Detailed operating surpluses/(deficits) for the Labour Operations Account and each item of mobile plant are shown in the Labour and Mobile Plant Operations Reports, which can be made available to members on request.

5 Other income is made up as follows:

	Y-T-D BUDGET	Y-T-D 2020/21
Shared Income from WMA	57,870	34,727
Insurance Claims	0	0
Sundry Income	0	0
Summons Costs	0	0
	57,870	**34,727**

6 The gross cost of each capital scheme is approved by the Board annually and detailed on the schedule of capital works as managed by the Project Engineer, which can be made available to members on request. The Grants Due/(Unapplied) also correspond with the figures shown on the Balance Sheet. The Executive Committee scrutinise this Report every year.

7 The EA Precept due for 2020/21 is payable to the EA on 31 May and the other half is payable to them on 30 November. The Board has no idea where or how this money is spent.

8 Detailed maintenance operations are approved by the Board annually and shown on the Operations map, together with the schedule of maintenance works for each catchment, which can be made available to members on request. Expenditure is analysed as follows:

	Y-T-D BUDGET	Y-T-D 2020/21
Labour Charges	22,434	28,132
Plant Charges	3,692	4,630
Materials	314	394
Contractors	37,369	46,861
Plant Hire & Transport	0	0
Direct Works	**63,809**	**80,017**
Technical Support Staff Costs	71,596	63,186
Other Technical Support Costs	611	6,848
Biodiversity Action Plan Costs	3,542	0
Maintenance Works	**139,557**	**150,051**

Norfolk Rivers Drainage Board

From: 01 April 2020 **Period To:** 3
To: 30 June 2020 **Year Ended:** 31 March 2021

Note **Notes to the Accounts**

9 Administration charges reflect the Board's share of consortium expenditure (excluding technical support costs). Detailed expenditure is monitored by the Consortium Management Committee and the Board every three months:

	Y-T-D BUDGET	Y-T-D 2020/21
Administration Staff Costs	30,910	30,869
Other Administration Costs	9,727	15,766
Development Expenditure	0	0
Drainage Rates AV Increases/(Decreases)	125	-82
Depreciation Kettlewell House	250	250
Sundry Debtors written off	0	0
Sundry Expenses	0	0
Settlement Discount	125	383
	41,137	**47,186**

10 **TANGIBLE FIXED ASSETS**

Cost	Land and Buildings	Plant and Equipment	Total
Opening Balance as at 1-4-2020 b/fwd	49,950	38,497	88,447
(+) Additions	0	0	0
(-) Disposals	0	-4,370	-4,370
(=) Closing Balance as at 30-6-2020 c/fwd	**49,950**	**34,127**	**84,077**
Depreciation			
Opening Balance as at 1-4-2020 b/fwd	11,988	25,333	37,321
(+) Depreciation Charge for year	250	900	1,150
(-) Accumulated Depreciation written out on disposal	0	-4,370	-4,370
(=) Closing Balance as at 30-6-2020 c/fwd	**12,238**	**21,863**	**34,101**
Net Book Value as at 31-3-2020	**37,962**	**13,163**	**51,125**
Net Book Value as at 30-6-2020	**37,712**	**12,264**	**49,976**

Full details of all movements during this year are recorded in the Board's Fixed Assets Register, which can be made available to members on request. The Board also shares ownership of a proportion of the WMAs Shared Fixed Assets, which were last valued by Cruso & Wilkin, Chartered Surveyors, as at 31 March 2018. Such assets have a Net Book Value of zero.

11 Additional sums are now being invested on the short term money market to maximise the return on the working balances, in accordance with the Board's Investment Policy. The Bank Account is reconciled as follows:

	2019/20	2020/21
Opening Balance as at 1-4 b/fwd	31,875	326,668
(+) Receipts	1,642,422	313,816
(-) Payments	-1,347,629	-178,455
(=) Closing Balance as at 30-6-2020 c/fwd	**326,668**	**462,029**
Balance on Statement as at 30-6-2020	290,434	462,029
Less: Unpresented payments	-18,944	0
Add: Unpresented receipts	55,177	0
Closing Balance as at 30-6-2020 c/fwd	**326,668**	**462,029**

12 Aged Debtor profile is currently as follows:

Debt period	Amount	Number of Debtors
<=30 days	470	1
>30 days and <=60 days	0	0
>60 days and <=90 days	0	0
>90 days	0	0
	470	**1**

>90 days	Amount	Inv. Date	Originator
	0		

Norfolk Rivers Drainage Board

From: **01 April 2020** **Period To:** **3**
To: **30 June 2020** **Year Ended:** **31 March 2021**

Note **Notes to the Accounts**

13 Work in Progress is currently made up of the following jobs:

Customer	Amount	Comp. Date	Originator
RBD0002 Broadland District Council Sprowston	2,506	Ongoing	Operations Engineer PG
RBR0001 Broads (2006) IDB	6,279	31.07.2020	Finance
RHE0001	156	Ongoing	Operations Engineer PG
RNA0002 NT WEG Scarrow Beck Downstream	6,253	Ongoing	Operations Engineer TJ
RWEG257-2018-4555	35,819	Ongoing	Operations Engineer PG
	51,013		

14 Term Deposits are currently as follows:

Financial Institution	Capital	Investment Date	Maturity Date	Variable Interest Rate
West Bromwich Building Society	500,000	31/01/2020	31/07/2020	0.86%
	500,000			

15 Special Levies are due to be paid by Constituent Councils in two halves on 1 May and 1 November every year.

16 There are currently 184 Ratepayers that have not paid their Drainage Rates for 2020/21, as compared to 170 Ratepayers this time last year. Summarised transactions for Drainage Rates and Special Levies during the year are as follows:

	2019/20	2020/21
Arrears b/fwd	314	-150
Drainage Rates for the year	81,586	83,306
Special Levies for the year	315,783	322,428
New Assessments	445	269
Value Decreases	-706	-502
Value Increases	261	233
Payments Received	-397,647	-238,914
Settlement Discount	-398	-383
Returned/(Represented) amounts	79	63
Irrecoverables and write offs	88	-1
Summons collection costs	0	0
Adjustments	45	1
Arrears c/fwd	**-150**	**166,349**

17 Prepayments represent the amount that has been paid to the WMA in advance, which will be used by the WMA to pay the Board's share of consortium expenditure during the next reporting period.

18 **Grants Reserve**
Movements on the Grants Reserve are made up as follows:

	2020/21
Opening Balance at 1-4-2019	-35,494
Add: Grant Received	0
Less: Grant Applied	2,592
Closing Balance as at 30-6-2020	**-32,902**

		2019/20	2020/21
SCH03	Giant Hogweed Project	3,792	3,792
SCH02	River Wensum Restoration Project WLMP	1,233	1,233
SCH07	River Nar Litcham to Lexham Hall Lakes	760	760
SCH12	River Wensum Resoration Scheme	22,059	21,482
SCH13	River Nar Restoration Scheme 4 Year	4,007	1,992
SCH25	WFD Maintenance Improvements PSCA	3,643	3,643
		35,494	**32,902**

Norfolk Rivers
Drainage Board

From:	**01 April 2020**	**Period To:**	**3**
To:	**30 June 2020**	**Year Ended:**	**31 March 2021**

Note **Notes to the Accounts**

19(i) The Board provides its employees with access to the Local Government Pension Scheme but does not need to Account for this as a defined benefit pension scheme to comply with the limited assurance audit regime. However the Board has chosen to do so because it does have a pension liability, which has been calculated by the LGPS Fund Actuary as at 31 March 2020.

19(ii) The Board is a member of the Water Management Alliance Consortium and as such also has a proportion of the pension liability for the shared staff that are employed by King's Lynn IDB, t/a the Water Management Alliance. The Fund Actuary for Norfolk County Council has prepared a separate Report for the Water Management Alliance, which identifies a notional net pension liability of £2,761,000 as at 31 March 2020 that is shared by all 5 Member Boards. The Board's share of this pension liability is set out every year in the WMAs Basis of Apportionment, which was approved by the Board on 30 January 2020.

20 The Reserves are managed in accordance with the Capital Financing and Reserves Policy, as approved by the Board on 21 January 2015. This policy is available for viewing on the Board's website.

21 The purpose of the Development Reserve is to reduce the impact on drainage rates and special levies from development that takes place in the area. The Board charges developers a standard rate per impermeable hectare for agricultural land which is developed and becomes a hard standing area, such as housing, roadways etc. The money is credited to this Reserve and then used to reduce the gross cost of capital work needed to cater for the additional flows arising from such development. The income for this Reserve therefore comes exclusively from developers and is used to fund in part improvement works that are necessary because of development.

22 The purpose of this Reserve is to reduce the impact on drainage rates and special levies as and when equipment is bought and sold, in accordance with the plant renewals programme. Depreciation is its primary source of income, which largely comes from drainage rates/special levies in the form of plant charges included within the maintenance budget, together with any profits on disposal. Changes in hourly charge out rates are determined by the Operations Manager and the Chief Executive. Expenditure is determined by the Board, following recommendations made by the Chief Executive and Operations Manager.

23 This Revaluation Reserve has arisen from the revaluation of the Board's share of Kettlewell House on 31 March 2009 (approx. 10%).

Related Party Transactions

24 Mr J F Carrick is the Chairman of the Norfolk Rivers IDB. He has been paid £0 Chairman's Allowance during the year.

25 The Board uses Rating Software for the collection of Drainage Rates known as DRS. The software was developed by Mr P J Camamile, the Chief Executive, and is supported by Byzantine Ltd. Mr P J Camamile is the Company Secretary of Byzantine Ltd, and his wife, Mrs P Camamile is a Director. Both are shareholders.

Recommended Actions:

1. To approve the Financial Report for the period ending 30-6-2020.

P J CAMAMILE MA FCIS
CHIEF EXECUTIVE

S JEFFREY BSc (Hons) FCCA
FINANCE & RATING MANAGER

NORFOLK RIVERS IDB

SCHEDULE OF PAID ACCOUNTS

Payment Date from: 01/04/2020

Payment Date to: 30/06/2020

NAME	DETAILS	% COST RECOVERABLE	AMOUNT PAID THIS PERIOD
Acorn Tree Service	Channel Clearance	100	8,407.00
Anglia Farmers Ltd	Materials/Equipment	55	2,030.58
Easy Petrol Post Driver	Petrol Post Driver	100	1,914.00
Environment Agency	Precept	0	37,427.00
GDR Sales Ltd	Plant/Labour Hire	4	28,525.20
Halls Power Equipment Ltd	Pole Saw, Zubat Saw	0	294.00
William J Hannant	Pine Tree Farm, Cromer - Rent/Costs	0	1,020.00
Inland Revenue	PAYE	0	2,404.86
Meteor Communications	Remote Camera Subscription	0	318.00
Native Landscapes	Treatment of Giant Hogweed	0	390.00
Norfolk Pension Fund	Superannuation	0	3,024.14
Norfolk Rivers Trust	Crayfish Drain Survey	0	2,000.00
Mr C Rangeley-Wilson	WEG River Restoration	100	6,954.90
Robert P Thain	Plant/Labour Hire	100	2,599.80
Skyguard Ltd	Skyguard Lone Worker Service	0	256.80
C R Turner	Low Loader Move	0	432.00
Vodafone Ltd	Mobile Phone Charges	0	161.40
WMA	Staff Recharges/Materials	0	110.94
Workwear (East Anglia) Ltd	PPE	0	68.83
	Please note that the amounts shown above include VAT		**£98,339.45**

NORFOLK RIVERS INTERNAL DRAINAGE BOARD
RISK REGISTER

STRATEGIC OBJECTIVES	RISK	IMPACT	LIKELIHOOD SCORE (1 – 3)	IMPACT SCORE (1 – 3)	RISK RATING (HIGH, MEDIUM, LOW)	RESPONSE (ACTIONS PLANNED/TAKEN)
To reduce the flood risk to people, property, public infrastructure and the natural environment by providing and maintaining technically, environmentally and economically sustainable flood defences within the Internal Drainage District (IDD)	(1a) Reduction in, or insufficient finance, grant and income (1b) EA may cease to pay highland water contributions to IDBs	Erosion of Board's capital and general reserves Reduction in FCERM service the Board is able to provide Unable to replace assets as scheduled in asset management plan	3	3	9 →	Explore alternative funding streams
	(1c) EA is no longer willing or able to carry out work on sea defences that protects the Internal Drainage District, or the works are undertaken to a reduced specification	Potential overtopping into IDD in severe weather events and cost implications of managing the increase in water	2	3	8 ↑	Develop Investment Plan with key stakeholders
	(1d) EA is no longer willing or able to carry out work on Main Rivers	Will limit the Board's ability to fulfil its statutory function	2	3	8 ↑	PSCA in place between IDB/EA, effective 2017/18 to undertake maintenance works on some sections of main river identified by the

STRATEGIC OBJECTIVES	RISK	IMPACT	LIKELIHOOD SCORE (1 – 3)	IMPACT SCORE (1 – 3)	RISK RATING (HIGH, MEDIUM, LOW)	RESPONSE (ACTIONS PLANNED/TAKEN)
						IDB's Project Engineer that will provide benefit to IDB watercourses, however EA has halted these works in 2018/19. The IDB has appealed the precept. Continue to encourage the EA to de-main lengths of less strategically important main river for the IDB to adopt and maintain
	(1m) Maintenance works constrained by the Water Framework Directive legislation and Habitat Regulations Assessment and onus of proof sits with IDBs	IDB could incur penalties/fines	2	3	. High 6 ↓	Work with EA, NE and voluntary sector orgs to meet WFD requirements. Agree interpretation of Habitat Regulations Assessments with NE. SMO regularly updated to remain WFD compliant Regular SMO update training for employees Pursue funding from all available sources
	(1n) Ability to deliver projects and carryout work is reduced, due to	Supply chains disrupted, no staff and contractors available to deliver work			Medium 3 →	Maintain 'key-worker' status, revise risk assessments, introduce new safe systems of work and make available the

STRATEGIC OBJECTIVES	RISK	IMPACT	LIKELIHOOD SCORE (1 – 3)	IMPACT SCORE (1 – 3)	RISK RATING (HIGH, MEDIUM, LOW)	RESPONSE (ACTIONS PLANNED/TAKEN)
	a pandemic	programmes. Costs escalate accordingly and work stops being done.				appropriate PPE, to ensure that operatives can continue to safely deliver all essential work on the ground. Invest in technology to ensure that office work can be done from home where possible, with Board, Stakeholder, consultant and clientele meetings proceeding as virtual meetings as required; ensuring there is good communication and that appropriate social distancing is adhered to in accordance with the Government's advice.
To liaise with EA to en-main sections of main river that will be de-listed by the EA.	(3a) EA may not provide funding to the IDB for this additional maintenance. (3b) EA will not de-main the rivers if the IDB refuses to adopt them.	Lack of maintenance on these sections of main rivers could adversely affect the IDB's watercourses and reduce the IDB's ability to fulfil its statutory function	3	2	High 6 ↑	Continue to liaise with EA to bring proposal to Board. De-maining of low consequence main river remains under consideration by EA. Public consultation during Autumn 2017 for national de-maining pilot study in Norfolk/Suffolk, but the pilot study is currently on hold in Norfolk

NORFOLK RIVERS INTERNAL DRAINAGE BOARD
RISK REGISTER

STRATEGIC OBJECTIVES	RISK	IMPACT	LIKELIHOOD SCORE (1 – 3)	IMPACT SCORE (1 – 3)	RISK RATING (HIGH, MEDIUM, LOW)	RESPONSE (ACTIONS PLANNED/TAKEN)
						Board has agreed to adopt de-mained rivers Prioritise maintenance programme
To enable and facilitate land use for residential, commercial, recreational and environmental purposes by guiding and regulating activities, which have the potential to increase flood risk	(4a) Planning Authorities ignore advice provided by Board, which leads to increased flood risk (4b) Potential for developers to allow SUDs to be managed by private companies who may allow them to fall into disrepair through lack of long term maintenance	Potential for increased flood risk Lost income from SWDCs and commuted sums Inadequate or total lack of maintenance of SUDs could have an adverse impact on the IDB infrastructure and subsequently increase the risk of flooding	2	3	High 6 ↓	Planning/Enforcement is undertaken by the Board's Sustainable Development Officers and issues are raised at Board meetings. Officers' comments on planning applications are available on Local Authority website. Updated Planning and Byelaw Strategy Document approved by the WMA on 7 December 2018 for consultation with LPAs and approved by the Norfolk Rivers IDB on 13 June 2019. A SUDs adoption and charging policy was adopted by the Board at its 26 January 2017 meeting to promote IDB services for adoption of SUDs to ensure these are properly maintained in perpetuity.

NORFOLK RIVERS INTERNAL DRAINAGE BOARD
RISK REGISTER

STRATEGIC OBJECTIVES	RISK	IMPACT	LIKELIHOOD SCORE (1 – 3)	IMPACT SCORE (1 – 3)	RISK RATING (HIGH, MEDIUM, LOW)	RESPONSE (ACTIONS PLANNED/TAKEN)
						At its 16 August 2018 meeting the Board adopted the variable SWDC rate and banding arising from the 2018 review undertaken by the WMA Flood and Water Manager and the South Holland IDB Engineer. New rates and banding introduced 1 October 2018.

Risk Assessment Matrix (From the Risk Management Strategy and Policy as approved 26 January 2017)

Risk Assessment Matrix

Likelihood			
Highly Likely	**Medium (3)**	**High (6)**	**High (9)**
Possible	**Low (2)**	**Medium (4)**	**High (6)**
Unlikely	**Low (1)**	**Low (2)**	**Medium (3)**
	Negligible	Moderate	Severe
	Impact		

The categories for impact and likelihood are defined as follows:

IMPACT

- Severe – will have a catastrophic effect on the operation/service delivery. May result in major financial loss (over £100,000) and/or major service disruption (+5 days) or impact on the public. Death of an individual or several people. Complete failure of project or extreme delay (over 2 months). Many individual personal details compromised/revealed. Adverse publicity in national press.

- Moderate – will have a noticeable effect on the operation/service delivery. May result in significant financial loss (over £25,000). Will cause a degree of disruption (2 – 5 days) or impact on the public. Severe injury to an individual or several people. Adverse effect on project/significant slippage. Some individual personal details compromised/revealed. Adverse publicity in local press.

- Negligible – where the consequences will not be severe and any associated losses and or financial implications will be low (up to £10,000). Negligible effect on service delivery (1 day). Minor injury or discomfort to an individual or several people. Isolated individual personal detail compromised/revealed. NB A number of low incidents may have a significant cumulative effect and require attention.

LIKELIHOOD

- Highly likely: very likely to happen

- Possible: likely to happen infrequently

- Unlikely: unlikely to happen.

A VIRTUAL MEETING OF THE WMA CONSORTIUM MANAGEMENT COMMITTEE (CMC) WAS HELD USING ZOOM ON FRIDAY, 26 JUNE 2020 AT 9.30 AM

* S G Bambridge (Norfolk Rivers IDB)
* L E Baugh (Broads (2006) IDB)
* R Buxton (Broads (2006) IDB)
* J Carrick (Norfolk Rivers IDB)
* H Carrie (Waveney, Lower Yare & Lothingland IDB)
* B Collen (Waveney, Lower Yare & Lothingland IDB)
* H G Cator (Norfolk Rivers IDB)
P Coupland (South Holland IDB)
* S G Daniels (Broads (2006) IDB)
* E Greenwell (East Suffolk IDB)
* Lord Howard of Rising (King's Lynn IDB)
* B Long (King's Lynn IDB)
* S A R Markillie (South Holland IDB)
* J Marson (East Suffolk IDB)
* T Matkin (King's Lynn IDB)
* C Mutten (Waveney, Lower Yare & Lothingland IDB)
* M Paul (East Suffolk IDB)
* D R Worth (South Holland IDB)

* Present (94%)

Mr S A R Markillie in the Chair

In attendance:

Ben Blower (WLY&L), Cathryn Brady (Sustainable Development Manager), Phil Camamile (Chief Executive), Sue Cook (PA to the CEO) and Sallyanne Jeffrey (Finance and Rating Manager)

ID	WMA Consortium Management Committee, Minute	Action
14/20	**APOLOGIES FOR ABSENCE**	
14/20//01	Apologies for absence were received from Peter Coupland.	
14/20/02	It was noted that the attendance register would be signed by all members present at a later date, in accordance with section 2.20 of the Consortium Agreement dated 15 May 2008.	
14/20/03	The Chief Executive confirmed that the meeting was quorate, with all 6 WMA Member Boards represented, in accordance with section 2.8 of the Consortium Agreement dated 15 May 2020.	
15/20	**WELCOME AND INTRODUCTIONS**	
15/20/01	The Chairman welcomed Jane Marson to the meeting and advised members that she was now Chairman of East Suffolk IDB and would serve on the Consortium Management Committee with immediate effect. He also informed members that Michael Paul had become Vice-Chairman of East Suffolk IDB. RESOLVED that this be noted.	
15/20/02	The Chairman welcomed Hamish Carrie, Bryan Collen, Chris Mutten and Ben Blower from Waveney, Lower Yare and Lothingland IDB to their first WMA CMC meeting. RESOLVED that this be noted.	

ID	WMA Consortium Management Committee, Minute	Action
16/20	**ELECTION OF CHAIRMAN AND VICE-CHAIRMAN**	
16/20/01	The Chief Executive requested nominations for Chairman of the WMA Consortium Management Committee for the year to 31 March 2021. It was proposed by Mr H G Cator, seconded by Mr T Matkin and carried unanimously to elect Mr S A R Markillie to serve as the CMC's Chairman for one year from 1 April 2020 to 31 March 2021.	
16/20/02	It was proposed by Mr S A R Markillie, seconded by Mr M Paul and carried unanimously to elect Mr R Buxton to serve as the CMC's Vice-Chairman for one year from 1 April 2020 to 31 March 2021. RESOLVED that this be noted.	
17/20	**DECLARATIONS OF INTEREST**	
17/20/01	Sam Markillie declared an interest in the payment of £254.25 and of £1,800 to Strawberry Hall Farms which appeared on the Schedule of Paid Accounts between 01 March 2020 and 31 March 2020. RESOLVED that this be noted.	
18/20	**MINUTES OF THE LAST MEETING**	
18/20/01	The minutes of the last Consortium Management Committee meeting held on 27 March 2020 were approved and confirmed as a true record. The minutes would be signed by the Chairman at a later date. Arising therefrom:	**SARM**
19/20	**MATTERS ARISING**	
19/20/01	**Relocation of WMA Office (06/20/01)**	
	The Chief Executive thanked Brian Long and reported that good progress had been made with completion documents now being prepared for signing. RESOLVED that this be noted.	
19/20/02	**Renewal of PSCAs with EA (06/20/02)**	
	The Chief Executive apprised members of the current position on renewing the 5 year Public Sector Co-operation Agreements (PCSAs) with the Environment Agency (EA): The PSCA with King's Lynn IDB had been renewed; the PSCA with South Holland IDB was pending signing by the EA; and Simon Hawkins Area Manager of the Eastern Area had stated he was prepared to extend the 3 PSCAs for Broads IDB, East Suffolk IDB and Norfolk Rivers IDB for a further year pending conclusion of the EAs investigation at Iken. The Chief Executive would discuss the merits of this proposal with the 3 Eastern Boards concerned, versus not extending, in an	

attempt to bring the EAs investigation to a conclusion. RESOLVED that this be noted.

19/20/03 Water Resources East (WRE) 06/20/03

The Chief Executive apprised members that he had asked ADA and ADAs Director on the WRE Board (David Thomas, Chief Executive of the Middle Level Commissioners) for an update, but this was still to be received. As Chairman of WRE, Henry Cator advised the Chief Executive to speak directly to Robin Price (Chief Executive of WRE) regarding the matter and lack of timely feedback received. RESOLVED that this be noted.

19/20/04 Development Control: Review of Enforcement Procedures (06/20/05)

The Sustainable Development Manager advised members that she was fully engaged with Phase 2 of the Enforcement Review and was speaking with a legal specialist to ensure that the resultant procedures were robust and correct. The Sustainable Development Manager also reported that ADA / Defra were reviewing the current set of Model Byelaws, and specifically the wording of Byelaw 2. Byelaw 2 was currently used by WMA Boards to differentiate between adopted and unadopted watercourses. The Chairman requested to be kept updated and offered the support of the Boards on the matter if needed. RESOLVED that this be noted.

19/20/05 Environment, Food and Rural Affairs (EFRA) Committee inquiry (10/20/01)

The Chief Executive advised members that he had submitted a response to EFRA as have ADA, regarding EFRA launching another inquiry into managing the risk of inland flooding in England. He conveyed that Innes Thompson (ADAs Chief Executive) is anticipating that the Bill will become an Act and that Defra officials were already in the process of drafting the regulations around the Bill, enabling IDBs to extend their areas to the watershed catchment in areas where it has local support, which was positive news for the Boards.

Following a question from Sir Edward Greenwell, the Chief Executive advised members that local support would likely be demonstrated by the Board firstly resolving to do it and the EAs Regional Flood and Coastal Committee (RFCC) approval, along with letters of endorsement from constituent Billing Authorities and Community Interest Groups.

Duncan Worth added that, although the CLA in Lincolnshire was fully supportive as they know what a good job the IDBs do, nationally some members are focussing on anticipated higher

levies, therefore may be less supportive. He suggested that additional communication from the Chief Executive and ADA might help them understand the importance and benefits of the Bill. RESOLVED that this be noted. **PJC**

20/20 SCHEDULE OF PAID ACCOUNTS

20/20/01 The Schedule of Paid Accounts for the period 1 March 2020 to 31 March 2020, totalling £136,829.75 (a copy of which is filed in the Report Book), was considered in detail and approved. There were no matters arising.

21/20 FINANCIAL REPORT, PERIOD 12, 2019/2020

21/21/01 The WMA Financial Report for the year ending 31 March 2020 (a copy of which is filed in the Report Book) was considered in detail and approved. There were no matters arising.

22/20 TO REVIEW AND APPROVE THE WMA GROUP INFORMATION SECURITY AND SYSTEMS – ACCEPTABLE USE POLICY

22/20/01 Particular attention was drawn to Section 9 of the policy referring to Social Media which applies to all staff and contractors. The Chairman requested that all impacted personnel be reminded and made aware of the need to have all Social Media text and images cleared by their Line Managers prior to posting. RESOLVED that this be noted. **PJC**

22/20/02 The Board asked what safeguarding for misuse by disgruntled former employees was in place. The Chief Executive advised that only 3 people in the WMA have logins for Facebook and Twitter, which are password protected and that he was one of these 3 people. Should the WMA become aware of such a situation, the passwords would immediately be changed to further protect the WMA and IDBs. RESOLVED that this be noted.

22/20/03 The CMC suggested that they would like to see increased use of Social Media platforms, ideally with a dedicated person managing communication to engage the public with the positive works carried out by the WMA and IDBs. RESOLVED that this be considered. **PJC**

22/20/04 It was agreed that the policy should retain its planned review date of August 2023; that Waveney, Lower Yare and Lothingland IDB be added to the policy and references to 'faxed communication' be replaced with 'data by any electronic means'. RESOLVED that this be noted. **PJC**

ID	WMA Consortium Management Committee, Minute	Action
23/20	**DATE AND TIME OF NEXT MEETING**	
23/20/01	The next meeting of the CMC would take place at 9.30 am on Friday 25 September at Kettlewell House in King's Lynn and/ or via Zoom.	
24/20	**ANY OTHER BUSINESS**	
24/20/01	Members expressed growing concern both generally and specifically at the EAs ability to misuse their permissive powers, allowing nature to take its course thus negatively impacting numerous natural freshwater environments. The Chief Executive agreed that the time feels right now to take specialist legal advice and to continue working closely with ADA. It was unanimously agreed that a joined up approach from the WMA along with other interested parties would be the preferred and most impactful way forwards. RESOLVED that this be noted.	**PJC**
25/20	**CONFIDENTIAL BUSINESS**	
25/20/01	It was agreed and thereby RESOLVED to exclude the public from the next part of the meeting due to the confidential nature of the business to be transacted, in accordance with Section 2 of the Public Bodies (Admission to Meetings) Act 1960.	

Water Management Alliance

Schedule of Paid Accounts

Payment Date From : 01/03/2020

Payment Date To : 31/03/2020

Account ID	Name	Details	Amount Paid This Period
AL0004	ALS Life Sciences Ltd	Nitrate Testing	126.00
AL0005	All Clear Drainage Consultants	Clear Blocked Drain	129.60
AN0003	Anglia IT Solutions DD	Hardware/Support	2,208.12
AN0004	Anglia IT Solutions Ltd	Hardware	6,731.04
AN0102	The AF Group Limited	Electricity/PPE/Recharges to	352.48
AS0105	Association of Drainage Authorities	WRE Subscription	2,761.36
ATT001	Julie Attwater	Childminder	81.00
BA0002	Banner Group Ltd	Stationery Supplies	822.07
BES001	BES Commercial Electricity Ltd	Standing Charge (Next Door)	25.67
BL0003	Bluebell Blinds	Roller Blinds SH Office	144.00
BO0002	Bobby Dazzlers Cleaning Ltd	Martham office cleaning	160.00
BR0208	Broads IDB	Rechargeable Work	216.54
BT0213	BT Payment Services Ltd	Telephone	131.92
CH0366	Chubb Fire & Security Ltd	Fire Alarm Maintenance	466.87
CO0346	Cope Safety Management Ltd	Health & Safety	1,614.10
DE0003	Dereham Town Council	NRIDB Board Meeting Venue	181.17
EA0002	East Suffolk Council	Conference Suffolk Coast Forum	720.00
EA0005	East Suffolk IDB	Rechargeable Works	99.27
EL0003	Electronics Computers and	DRS Support	1,704.00
EO0001	Eon UK plc	Gas	474.30
EO0101	EOC Services Ltd	Air Con Maintenance & Repair	1,876.20
ES0401	ESPO	Stationery	729.43
GA0001	G & A Electronic Print Systems	Stationery	1,360.80
GB0001	GB Security Group	Security Maintenance	1,030.80
GR0007	Great Yarmouth & Gorleston	Rechargeable Works	2,350.00
H20801	H20 Vend Ltd	Water Machine	110.16
HE0001	HP Inc UK Ltd	Printer service & support	1,147.18
HI0003	Hix and Son	Legal Fees	465.00
IG0001	Ignite	Broadband Line Rental	106.80
IN0904	Inland Revenue	PAYE & NIC	42,141.64
JA0003	Jacobs UK Ltd	Rechargeable Works	7,719.60
KI1100	Kings Lynn IDB	Rechargeable Works	10,635.12
LI1204	Lincolnshire County Council	Former Staff Pension	364.95
MA0001	Sam Markillie	Chairman's Allowance/Expenses	254.25
MA0004	Magpie Security Services Ltd	Locksmiths	76.50
MO1315	Mossop and Bowser	Solicitors	169.20
MP0001	MP Alarms	Service & Maintenance Charge	810.00
MTL001	M T L	Telephone Maintenance	1,194.00
NO0001	Norfolk Pension Fund	Ex Employees Pension Cont	775.02
NO1450	Norfolk Pension Fund	NCC Pension Contribution	36,469.22
NOR001	Norse Waste Solutions Ltd	Martham Waste/Refuse Collection	75.60
ON1511	Onebill Telecom	Telephone	376.81

Water Management Alliance

Schedule of Paid Accounts

Payment Date From : 01/03/2020

Payment Date To : 31/03/2020

Account ID	Name	Details	Amount Paid This Period
QM1702	QMS International	External Audit	600.00
RE0005	Rentokil Initial Martham	Spray dispenser/Bin liners/Sanitary	23.40
RO0001	Roffes Catering (Lincs)	Buffet Lunch	212.50
RO0005	Royal Town Planning Institute	Training	861.60
SO0001	South Holland IDB	Rechargeable Works	2,153.87
SO1906	S H D C - Revenue Services DD	Business Rates	425.00
ST0001	Strawberry Hall Farms	Chairman	1,800.00
TO0003	Towergate Insurance Brokers	Insurance	368.44
UN2101	Unison Eastern Region	Unison	22.50
UT0001	Utilize PLC	Hardware/Support	98.40
VEO001	Veolia Environmental Services Ltd	Waste Disposal	137.48
VO2201	Vodafone Ltd	Mobile Phone Charge	552.45
WO0001	Worldpay Ltd	Admin Fee	65.00
WO0005	Workwear (East Anglia) Ltd	PPE	121.32

Please note that the amounts shown above include Vat £ 136,829.75

Water Management Alliance

From: 01 April 2019 **Period To:** 12
To: 31 March 2020 **Year Ended:** 31 March 2020

NOTES	WMA GROUP INCOME AND EXPENDITURE ACCOUNT	£ Y-T-D BUDGET	£ Y-T-D ACTUAL	£ Y-T-D VARIANCE	£ ANNUAL BUDGET	£ PROJECTED OUT-TURN	£ PROJECTED VARIANCE
	Income						
1	**Net Consortium Charges**						
	Broads IDB	325,668	323,311	-2,357	325,668	323,311	-2,357
	East Suffolk IDB	185,275	177,643	-7,632	185,275	177,643	-7,632
	King's Lynn IDB	375,126	339,803	-35,323	375,126	339,803	-35,323
	Norfolk Rivers IDB	213,683	211,361	-2,322	213,683	211,361	-2,322
	South Holland IDB	357,930	363,709	5,779	357,930	363,709	5,779
	Net Consortium Charges	**1,457,681**	**1,415,827**	**-41,854**	**1,457,681**	**1,415,827**	**-41,854**
2	**(+) Other Income**						
	Services provided to third parties	1,136,953	877,819	-259,134	1,136,953	877,819	-259,134
	Sales of Rating Software Licences/Ancillary Services	2,000	5,361	3,361	2,000	5,361	3,361
	Rating Software Support	21,425	23,861	2,436	21,425	23,861	2,436
	Rental Income from Offices	32,300	25,946	-6,354	32,300	25,946	-6,354
	Sundry Income	39,760	29,429	-10,331	39,760	29,429	-10,331
	(+) Other Income	**1,232,438**	**962,416**	**-270,022**	**1,232,438**	**962,416**	**-270,022**
	(=) Total Income	**£2,690,119**	**£2,378,243**	**-£311,876**	**£2,690,119**	**£2,378,243**	**-£311,876**
	(-) Expenditure						
	Administration Costs						
3	**Shared Administration Staff**	638,694	505,601	133,093	638,694	505,601	133,093
4	**Establishment**						
	Kettlewell House (shared)	100,143	105,131	-4,988	100,143	105,131	-4,988
	Marsh Reeves (South Holland IDB)	28,186	22,999	5,187	28,186	22,999	5,187
	Martham Office (Broads IDB and Norfolk Rivers IDB)	2,982	2,374	608	2,982	2,374	608
	Kessingland Office (East Suffolk IDB)	2,340	0	2,340	2,340	0	2,340
	Establishment	**133,651**	**130,504**	**3,147**	**133,651**	**130,504**	**3,147**
5	**Shared ICT**						
	Hardware Support and Maintenance	18,960	18,355	605	18,960	18,355	605
	Software Support and Maintenance	54,448	34,684	19,764	54,448	34,684	19,764
	Website Maintenance and Development	2,581	2,280	301	2,581	2,280	301
	New Software and Upgrades	8,753	43,346	-34,593	8,753	43,346	-34,593
	New ICT Infrastructure	49,251	29,169	20,082	49,251	29,169	20,082
	Shared ICT	**133,993**	**127,834**	**6,159**	**133,993**	**127,834**	**6,159**
6 (i)	**Other Shared Administration**						
	Legal and Professional Charges	11,252	17,501	-6,249	11,252	17,501	-6,249
	Insurances	80,847	85,578	-4,731	80,847	85,578	-4,731
	Marketing and PR Expenses	10,512	5,111	5,401	10,512	5,111	5,401
(ii)	WMA Chairman's Allowance	1,500	1,500	0	1,500	1,500	0
	Annual Subscriptions	1,577	1,649	-72	1,577	1,649	-72
	Actuary Fees	483	470	13	483	470	13
	Sundry Expenses	12,535	10,974	1,561	12,535	10,974	1,561
	Other Shared Administration	**118,706**	**122,783**	**-4,077**	**118,706**	**122,783**	**-4,077**
7 (i)	**Other Administration**						
	Public Notices	0	0	0	0	0	0
	Former Staff Pension Charges	7,656	7,475	181	7,656	7,475	181
(ii)	Members Expenses	750	254	496	750	254	496
(ii)	Chairman's Allowances	14,000	14,000	0	14,000	14,000	0
	Meetings and Inspections	4,295	3,610	685	4,295	3,610	685

Water Management Alliance

From: 01 April 2019 **Period To:** 12
To: 31 March 2020 **Year Ended:** 31 March 2020

NOTES	WMA GROUP INCOME AND EXPENDITURE ACCOUNT	£ Y-T-D BUDGET	£ Y-T-D ACTUAL	£ Y-T-D VARIANCE	£ ANNUAL BUDGET	£ PROJECTED OUT-TURN	£ PROJECTED VARIANCE
	Legal and Professional Charges	21,600	30,941	-9,341	21,600	30,941	-9,341
	Audit and Compliance Fees	15,775	52,575	-36,800	15,775	52,575	-36,800
	ADA Expenses	20,140	20,838	-698	20,140	20,838	-698
	Other Administration	**84,216**	**129,693**	**-45,477**	**84,216**	**129,693**	**-45,477**
	Administration Costs	**1,109,260**	**1,016,415**	**92,845**	**1,109,260**	**1,016,415**	**92,845**
	Technical Support Costs						
8	**Shared Technical Support Staff**	1,213,912	1,084,193	129,719	1,213,912	1,084,193	129,719
9	**Other Technical Support Staff**	256,150	251,931	4,219	256,150	251,931	4,219
*	**Technical Support Staff (shared with external RMAs)**	92,587	0	92,587	92,587	0	92,587
10	**Other Technical Support**						
	Technical Consultants	8,160	20,667	-12,507	8,160	20,667	-12,507
	Land Registry Fees	6,000	1,861	4,139	6,000	1,861	4,139
	Sundry Expenses	4,050	3,176	874	4,050	3,176	874
	Other Technical Support	**18,210**	**25,704**	**-7,494**	**18,210**	**25,704**	**-7,494**
	Technical Support Costs	**1,580,859**	**1,361,828**	**219,031**	**1,580,859**	**1,361,828**	**219,031**
	(-) Total Expenditure	**£2,690,119**	**£2,378,243**	**£311,876**	**£2,690,119**	**£2,378,243**	**£311,876**
	(+/-) Profit/(Loss) on disposal of Shared Fixed Assets	0	0	0	0	0	0
	(=) Net Surplus/(Deficit) for the Year	**£0**	**£0**	**£0**	**£0**	**£0**	**£0**

Water Management Alliance

From:	**01 April 2019**	**Period To:**	**12**
To:	**31 March 2020**	**Year Ended:**	**31 March 2020**

NOTES	BALANCE SHEET	£ 01/04/2019	£ MOVEMENT	£ 31/03/2020
11	**Shared Fixed Assets**			
(i)	Fixtures and Fittings	0	0	0
(ii)	ICT Equipment	0	0	0
(iii)	Office Equipment	0	0	0
(iv)	Vehicles	0	0	0
		0	**0**	**0**
	Current Assets			
12	Eyecare Vouchers and Work in Progress	-15,814	13,572	-2,242
13	Sundry Debtors Due and Prepayments	128,929	-41,510	87,419
14	Vat Refundable/(Payable)	11,142	-3,550	7,592
15	Bank Account	-24,296	29,088	4,792
16	Petty Cash	200	0	200
17	PMH Insurance and Cycle to Work Scheme	216	-216	0
		100,377	**-2,616**	**97,761**
	Current Liabilities			
18	Creditors	-551	5,357	4,806
	Payroll Control	1,660	-518	1,142
19	Accruals	60,276	50,795	111,071
20	Payments received in advance/(due) from WMA IDBs	38,992	-58,251	-19,259
		100,377	**-2,617**	**97,760**
	Net Current Assets/(Liabilities)	**0**	**0**	**0**
	Less Long Term Liabilities:			
21	Net Pension Liability/(Asset)	2,429,000	332,000	2,761,000
	Net Assets	**-£2,429,000**	**-£332,000**	**-£2,761,000**
	Reserves			
22	General Reserve	0	0	0
21	Pension Reserve	-2,429,000	-332,000	-2,761,000
	Total Reserves	**-£2,429,000**	**-£332,000**	**-£2,761,000**

P J CAMAMILE MA FCIS
CHIEF EXECUTIVE

S JEFFREY BSc (Hons) FCCA
FINANCE & RATING MANAGER

Water Management Alliance

From:	**01 April 2019**	**Period To:**	**12**
To:	**31 March 2020**	**Year Ended:**	**31 March 2020**

Note **Notes to the Accounts and Recommended Actions**

1 Administration and Technical Support Services

Last year the group has had another successful year with four out of the five Board's net consortium charges coming in under budget. The actual variances can be seen in each Board's Income and Expenditure Account, which explains where these differences between budget and actual have come from (please see attached). South Holland came in slightly over budget. This is due to this Board being unsuccessful in renting their offices in the current climate. There was also a reduction in the number of hours booked to capital projects as projected for Karl and Rachael. Rachael was seconded to the Sustainable Development Department for 3 months and so was unable to be utilised in the engineering department. These capital schemes have now been delayed for a further 12 months due to COVID-19.

2 Other Income

We have carried out work for an increasing number of Risk Management Authorities and others during this year, which has helped to reduce and minimise net consortium charges for the group, particularly for the WMA (Eastern) IDBs.

3 Shared Administrative Staff

Staff salaries have increased on average 2.7% from 1 April 2019. Pension costs have increased by 0.5% to 22.5% of employees pensionable pay. We have increased the number of staff to add resilience to the back office, and to enable us to support the front line staff as per the business strategy.

4 Establishment Costs

Establishment costs for Kessingland are less than budgeted for due to giving notice before 31st March 2019, and budget setting being completed in November 2019. No costs were incurred in 2019/20.

5 Shared ICT

Shared ICT includes expenditure on all network hardware, software and firmware. It excludes all desktop PCs and laptops, which are costed to the employee. ICT costs are apportioned to each Member Board according to its proportion of total annual value for all Boards in the group.

6 Other Shared Administration

(i) Other shared administration costs are apportioned to each Member Board according to its proportion of the total annual value for all Boards in the group.

(ii) The Chairman of the WMA receives an annual allowance of £1,500 for the purposes of fulfilling his/her duties during the year.

Water Management Alliance

From:	**01 April 2019**	**Period To:**	**12**
To:	**31 March 2020**	**Year Ended:**	**31 March 2020**

Note **Notes to the Accounts and Recommended Actions**

7 **Other Administration**

(i) Other administration costs are not shared costs. They are administration costs that are charged directly and controlled by the Member Boards themselves, as opposed to the Consortium Management Committee (CMC).

(ii)

Board	**Members Expenses**	**Chairman's Allowance**	**Total 2019/20**
Broads IDB			
Henry Cator	0	3,500	3,500
East Suffolk IDB			
Richard Pipe	0	0	0
King's Lynn IDB			
Cllr Brian Long	0	3,500	3,500
Norfolk Rivers IDB			
John Carrick	0	3,500	3,500
South Holland IDB			
Duncan Worth	0	3,500	3,500
Sam Markillie	254		254
	£254	**£14,000**	**£14,254**

8 **Shared Technical Support Staff**

The WMA employs 18 shared technical support staff, 13 of which are wholly utilised in the eastern area, 1 which is shared with King's Lynn IDB, 1 shared across South Holland IDB and Kings Lynn IDB, and 5 others that are shared across all Boards. The costs of employing the shared technical support staff are paid for by Broads IDB, East Suffolk IDB, King's Lynn IDB, Norfolk Rivers IDB and South Holland IDB, according to where/whom they have been working.

9 **Other Technical Support Staff**

Other technical support staff costs are not shared costs. They are defined as 'other employees' in the Consortium Agreement and are therefore controlled by the Member Boards themselves, as opposed to the CMC: South Holland IDB employs 2.00 full time technical support staff and King's Lynn IDB employs 2 technical support staff (1.86 FTEs). The employees are accountable to each respective Board (as opposed to the CMC) and the associated employment costs/liabilities are paid for and met by each Board accordingly.

10 **Other Technical Support**

Other technical support costs are not shared costs. They are costs that are charged directly and controlled by the Member Boards themselves, as opposed to the CMC. This is higher than budgeted for the Eastern Boards, as they recruited a temporary CAD technician to develop the CAD templates for the maintenance schedules, and an additional resource to map out the pumping stations, create and ensure access to emergency plans, and undertake a full inventory of the Martham Yard amongst other adhoc duties.

Water Management Alliance

From:	**01 April 2019**	**Period To:**	**12**
To:	**31 March 2020**	**Year Ended:**	**31 March 2020**

Note **Notes to the Accounts and Recommended Actions**

11 Shared Fixed Assets

The office at Kettlewell House is owned by King's Lynn IDB (80%), Broads IDB (10%) and Norfolk Rivers IDB (10%) and is shown in the Accounts of each Board as a Fixed Asset respectively. It is not therefore a shared fixed asset for the purposes of the Consortium Agreement. The office at Marsh Reeves is wholly owned by South Holland IDB and is not a shared fixed asset. However other fixed assets that are procured by the group are shared fixed assets and are recorded in the WMAs Shared Fixed Assets Register. For the purposes of Accounting Proper Practices the appropriate share of these assets is also recorded in each Board's Fixed Assets Register and valued on the statutory Annual Return at net realisable value. Shared assets procured through the WMA are written off (fully depreciated) in the same year as they are purchased and therefore have a net book value of zero. The cost of this is reflected in each Member Board's annual net consortium charge. However if the Consortium was dissolved these assets would be sold and the net sale proceeds would be shared accross the Member Boards according to their proportion of total annual value for all Boards in the group. The net realisable value of each asset type has been estimated as follows:

(i) Fixtures and Fittings

The net realisable value of Fixtures and Fittings has been valued by Cruso & Wilkin, Chartered Surveyors as £7,500 as at 31 March 2018.

(ii) ICT Equipment

The net realisable value of ICT Equipment has been valued by Cruso & Wilkin, Chartered Surveyors as £8,500 as at 31 March 2018.

(iii) Office Equipment

The net realisable value of Office Equipment has been valued by Cruso & Wilkin, Chartered Surveyors as £2,000 as at 31 March 2018.

(iv) Vehicles

There are no company vehicles, following the decison taken in 2012 to change the travelling allowances and mileage rates payable.

12 Eyecare Vouchers and Work in Progress

Eyecare vouchers are made available to employees, which meets the employers statutory obligation to pay for eye tests and in some cases provide glasses. Work in Progress relates to rechargeable costs that will be invoiced to others in due course:

	No.	01 April 2019	No.	31 March 2020
Eyecare Vouchers	4	153	0	0
Work In Progress	4	-15,967	4	-2,242
	8	**-£15,814**	**4**	**-£2,242**

13 Sundry Debtors Due and Prepayments

		01 April 2019		31 March 2020
(i) Sundry Debtors Due	**No.**	**£**	**No.**	**£**
<=30 days	7	109,506	9	83,335
> 30 days and <= 60 days	1	12,000	0	0
> 60 days and <= 90 days	2	1,298	0	0
> 90 days	0	0	0	0
	10	**£122,804**	**9**	**£83,335**

Water Management Alliance

From:	**01 April 2019**	**Period To:**	**12**
To:	**31 March 2020**	**Year Ended:**	**31 March 2020**

Note **Notes to the Accounts and Recommended Actions**

(ii)	**Prepayments**	**01 April 2019**	**31 March 2020**
6685	BRIDB Chairman's Allowance	2,042	0
6687	KLIDB Chairman's Allowance	2,042	2,042
6689	SHIDB Chairman's Allowance	2,042	2,042
		£6,125	**£4,083**
		£128,929	**£87,419**

14 Vat Refundable/(Payable)

The WMA is Vat Registered (Registration Number 916410741). Vat is reclaimed from/paid to HMRC every 3 months.

15	**Bank Account**	**31 March 2020**
	Opening Balance, as at 1/4/2019 b/fwd	-24,297
	(+) Receipts	3,486,716
	(-) Payments	-3,457,627
	Closing Balance, as at 31/3/2020 c/fwd	**£4,792**
	Balance on Statement, as at 31/3/2020	23,104
	Less: Unpresented Payments	-73,312
	Add: Unpresented Receipts	55,000
	Closing Balance, as at 31/3/2020 c/fwd	**£4,792**

16 Petty Cash

Petty cash is managed on an imprest system, which is reconciled monthly. Funds are topped up to £200 periodically.

17 PMH Insurance and Cycle to Work Scheme

(i)	**PMI Insurance**	**01 April 2019**	**31 March 2020**
	Data Manager (WMA)	0	0
	Environmental Manager (WMA)	0	0
	Project Engineer (WMA)	0	0
	District Engineer (South Holland IDB)	0	0
	Project Engineer (WMA Eastern)	0	0
	Operations Engineer (WMA Eastern)	0	0
	Funding & Comm Engagement Officer (WMA Eastern)	0	0
	Environmental Officer (WMA Eastern)	0	0
	Operations Manager (SHIDB)	216	0
	Operations Manager (Pevensey)	0	0
	Flood and Water Officer (Pevensey)	0	0
		216	**0**

Water Management Alliance

From:	**01 April 2019**	**Period To:**	**12**
To:	**31 March 2020**	**Year Ended:**	**31 March 2020**

Note **Notes to the Accounts and Recommended Actions**

18 Creditors

Suppliers are paid within 30 days of receiving the Invoice, in accordance with King's Lynn IDBs Financial Regulations (KLIDB).

19 Accruals	**01 April 2019**	**31 March 2020**
KLIDB Land Registration Fees	5,000	5,000
Staff Costs	4,565	13,075
ICT Provision	22,490	30,475
Chairmans' Allowances	6,072	5,646
Promotional Film	8,000	8,000
Internal Audit	1,750	3,475
External Audit	12,400	45,400
	£60,276	**£111,071**

20 Payments received in advance/(due) from WMA IDBs	**01 April 2019**	**31 March 2020**
Broads (2006) IDB	-5,169	-2,606
East Suffolk IDB	8,723	-2,881
King's Lynn IDB	10,269	-4,429
Norfolk Rivers IDB	22,729	-4,888
South Holland IDB	2,440	-4,456
	£38,992	**-£19,259**

21 Net Pension Liability/(Asset) and Pension Reserve

The pension liability has been estimated by the Fund Actuary and is meant to show the extent of the WMAs liability at the Balance Sheet date, based on a number of actuarial assumptions. This includes an estimate McCloud judgement allowance. However it is important to note that this Reserve does not represent an estimate of the exit cost of withdrawing from the Local Government Pension Scheme. If the Consortium dissolved the actual exit cost of withdrawing from the scheme would need to be established and then shared across all 5 Member Boards, in accordance with the Consortium Agreement.

22 General Reserve

The WMA has no General Reserve (any small amount shown represents rounding differences that have arisen when apportioning shared income and expenditure between the Boards). Payments received from the Member Boards to pay their share of the group's net expenditure are shown collectively as a Current Liability, rather than as a General Reserve.

Recommended Actions

1 To approve the Financial Statements for Period 12, ending 31-3-2020.

P J CAMAMILE MA FCIS
CHIEF EXECUTIVE

S JEFFREY BSc (Hons) FCCA
FINANCE & RATING MANAGER

Distributed to:

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Gordon Bambridge (Vice-Chairman)
Henry Birkbeck
Harry Blathwayt
Bill Borrett
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