

A MEETING OF THE NORFOLK RIVERS INTERNAL DRAINAGE BOARD WAS HELD IN THE ANGLIA ROOM, CONFERENCE SUITE, BRECKLAND DISTRICT COUNCIL, ELIZABETH HOUSE, WALPOLE LOKE, DEREHAM, NORFOLK ON THURSDAY 16 AUGUST 2018 AT 10.00 AM.

Elected Members

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

Appointed Members

Breckland DC

- * S G Bambridge
- W Borrett
- * Mrs L Monument

Broadland DC

- * Mrs C H Bannock
- * P Carrick
- * G Everett
- Vacancy**

King's Lynn & WN BC

- Mrs E Watson

North Norfolk DC

- * V FitzPatrick
- * P Moore
- * Mrs J Oliver
- * R Reynolds
- * R Stevens

South Norfolk DC

- * P Broome
- C Foulger
- * Dr N Legg

Present (65%)

Mr J F Carrick in the Chair

In attendance:

Mr P Camamile (Chief Executive), Miss C Brady (Flood and Water Officer),
Mr P George (Operations Engineer), Mr M Philpot (Project Engineer),
Ms H Mandley (Environmental Officer), Mrs M Creasy (minutes)
and Mrs C Cocks (minutes)

ID	Norfolk Rivers IDB, Minute	Action
50/18	APOLOGIES FOR ABSENCE	
50/18/01	Apologies for absence were received on behalf of Messrs W Borrett, J Borthwick, J Bracey, H G Cator, N W D Foster, C Foulger, J F Oldfield, P D Papworth, Dr N Legg and Mrs E Watson.	
50/18/02	In the absence of the Board Chairman, Mr P D Papworth, the meeting was chaired by Mr J F Carrick. RESOLVED that this be noted.	
51/18	WELCOME AND INTRODUCTIONS	
51/18/01	Miss Jessica Nobbs, Flood and Water Officer, and Mrs Cheryl Cocks, Assistant to the PA to the CEO, were welcomed to their first meeting.	
52/18	DECLARATIONS OF INTEREST	
52/18/01	There were no declarations of interest other than those already recorded in the Members' Register of Interests. The Chief Executive requested that all new members please complete and return their Declaration of Interest Forms as soon as possible.	
53/18	MINUTES OF THE LAST BOARD MEETING	
53/18/01	The minutes of the last Board meeting held on 24 May 2018 were approved and signed as a true record. Arising therefrom:	
53/18/02	De-maining Proposals (04/18/02)	
	(i) The Chief Executive reported that the decision by Norfolk County Council (NCC) to not support de-maining relates to all rivers within Norfolk including those entirely within the internal drainage districts. Concerns were raised whether councillors were properly briefed. The IDB had been informed that they were supporting the Environment Agency (EA) who were taking the lead in this scheme proposal.	
	(ii) Mrs J Oliver recorded that she was a member of the NCC Environment, Development and Transport Committee and that the consensus from this Committee, based on information provided by the EA, was that the de-maining pilot study appeared to be a cost saving exercise for the EA and had therefore opposed the de-maining proposal. The Chairman reiterated the importance of the de-maining pilot study to provide flood protection for people and property in this area and also how adequate maintenance of the main rivers would support the IDB drainage system. He requested that all County and District Councillors should be proactive in getting de-maining back on the agenda and should impress upon their respective Local Authorities and NCC the importance of this matter.	All County & District Councillors

ID Norfolk Rivers IDB, Minute	Action
<p>(iii) Members ratified the Norfolk Rivers IDB Executive Committee's proposal for officers and appointed member Mr S G Bambridge to arrange to meet with NCC to explain the benefits of de-maining and urge them to reconsider. RESOLVED that this be noted.</p>	SGB/PJC
<p>53/18/03 Mr R Reynolds requested an update on the Rivers Wensum and Stiffkey. This would be provided outside the meeting.</p>	MP
<p>54/18 MINUTES OF THE LAST EXECUTIVE COMMITTEE MEETING</p>	
<p>54/18/01 The minutes of the last Executive Committee meeting held on 24 May 2018 were considered in detail and approved, subject to the amendment in minute 13/18/03 to record the correct date of 31 March 2018. Other matters arising:</p>	
<p>54/18/02 Governance Arrangements: Membership (12/18/03)</p> <p>Members were apprised that membership attendance at Board meetings during 2017/2018 was an average of 50% and of the Executive Committee's consideration of this issue in its meeting earlier this morning. It was agreed that the Chief Executive prepares a briefing paper on the reconstitution of the Norfolk Rivers IDB for consideration by the Executive Committee prior to making a recommendation to the Board. RESOLVED that this be noted.</p>	PJC
<p>55/18 OPERATIONS REPORT</p>	
<p>55/18/01 The Operations Report (a copy of which is filed in the Report Book), was considered in detail and approved. Arising therefrom:</p>	
<p>55/18/02 Environment Agency Public Sector Co-operation Agreements (PSCA) Work: EA Main River Maintenance (1.2)</p> <p>The Project Engineer apprised Members that a programme for works has been developed and it is hoped that EA approval will be received by the end of the month to enable works to be undertaken on main river. The IDB had been awarded a reduced programme for managing the EA's weed cutting across Norfolk in comparison with last year. RESOLVED that this be noted.</p>	
<p>55/18/03 Health and Safety (2)</p> <p>There were no incidents to report during this reporting period. RESOLVED that this be noted.</p>	
<p>55/18/04 Elsing Culvert (5)</p> <p>Mr J F Carrick declared an interest in this item as water from his land is taken by the Elsing culvert. RESOLVED that this be noted.</p>	

ID Norfolk Rivers IDB, Minute	Action
55/18/05 Mr M J Sayer declared an interest in the Elsing Culvert item.	
55/18/06 Members considered the Project Engineer's report on the results of the Board approved survey of the Elsing culvert which had established that this culvert is in generally good condition with some age related deterioration around mortar loss on some of the brickwork that would benefit from lining to prevent further deterioration, whilst the upstream headwall was in poor condition and would need to be replaced.	
55/18/07 Enquiries with specialists had been sought as to the best way to maintain the culvert and suggestions of the use of a flexible high density polyethylene plastic liner which, when heated, moulds over obstructions and has a life expectancy of 100 years, had been suggested as a lining for the culvert as this method has been frequently used in the restoration of very old structures and rivers and proven to be successful. Discussion ensued about the use of plastic and what happens to it as it breaks down.	
55/18/08 It was agreed and thereby RESOLVED to adopt the Elsing culvert and to investigate funding options to bring the culvert into good condition. It was noted that adoption of the culvert would afford it some protection via the Board's Byelaws against any future development in the vicinity that could adversely impact on the culvert.	MP
<p>55/18/09 Hydrology</p> <p>Mr M Sayer informed members that there had been 58 days without rain between 29 May 2018 and 27 July 2018, the longest dry period recorded throughout East Anglia since circa 1835.</p>	
56/18 PLANNING REPORT	
56/18/01 The Planning Report, (a copy of which is filed in the Report Book), was considered in detail and approved. Arising therefrom:	
<p>56/18/02 Delegated Consents Determined (2)</p> <p>The delegated consents determined by Officers in accordance with their delegated authority were considered in detail and approved. There were no matters arising.</p>	
<p>56/18/03 Surface Water Development Contribution Charges and Banding</p> <p>The review of surface water development charges and banding that had been discussed with ADA and subjected to additional independent legal review (a copy of which is filed in the Report Book), was considered in detail and approved. Arising therefrom:</p>	
56/18/04 It was proposed by Mr S G Bambridge, seconded by Mr G Everett and carried unanimously save for one abstention from Mr P Moore, to adopt the revised banding and surface water development contribution	

ID	Norfolk Rivers IDB, Minute	Action
	charges structure as set out in the review and to increase the rates charge in line with inflation annually thereafter, with a detailed review undertaken every five years. RESOLVED that this be noted.	
56/18/05	It was agreed to implement the revised unattenuated surface water development contribution rate of £117,131 per impermeable hectare with effect from 1 October 2018. RESOLVED that this be noted.	
57/18	ENVIRONMENTAL REPORT	
57/18/01	The Environmental Report was considered in detail and approved (a copy of which is filed in the Report Book). Arising therefrom:	
57/18/02	Norfolk Rivers IDB Biosecurity Policy (1.5) Members considered and approved the Biosecurity Policy that had been produced by ADA and modified by the Environmental Manager to meet the requirements of the Norfolk Rivers IDB, (a copy of which is filed in the Report Book). Arising therefrom:	
57/18/03	It was agreed and thereby RESOLVED to adopt the biosecurity procedures as set out in the Board's Biosecurity Policy.	
57/18/04	Norfolk Crayfish Group The Environmental Officer apprised members of her attendance at a recent meeting of the Norfolk Crayfish Group where the trapping of signal crayfish was considered harmful to the native white clawed crayfish. This opinion was endorsed by Norfolk Rivers IDB as trapping increases the spread of the non-native signal crayfish leading to a decline in the populations of the native white clawed crayfish.	
58/18	FINANCIAL REPORT	
58/18/01	The Financial Report for the period 1 April 2018 to 30 June 2018, (a copy of which is filed in the Report Book), was considered in detail and approved. There were no matters arising.	
59/18	SCHEDULE OF PAID ACCOUNTS	
59/18/01	The Schedule of Paid Accounts for the period 1 April 2018 to 30 June 2018, totalling £178,509.63 (a copy of which is filed in the Report Book), was considered in detail and approved. There were no matters arising.	
60/18	MATERIAL CHANGES TO RISK REGISTER	
60/18/01	Members considered the risk register for those risks with a risk	

ID	Norfolk Rivers IDB, Minute	Action
	assessment matrix score of ≥ 6 . Arising therefrom:	
60/18/02	It was agreed to reduce the risk trend for items (7) and (8) of the Risk Register following the Board's adoption of the new surface water development contributions banding/charging methodology. RESOLVED that this be noted.	MEC
61/18	REGISTER OF ELECTORS	
61/18/01	The Register of Electors had been prepared in accordance with Rule 3 (11) of the Land Drainage (Election of Drainage Boards) Regulations 1938 (as amended) with notice of the availability of the Register published on the Board's website. Since no objections to the Register had been received it was agreed and thereby RESOLVED to approve the Register of Electors in accordance with the above Regulations.	
62/18	CORRESPONDENCE	
62/18/01	There was no correspondence requiring the Board's consideration during this reporting period.	
63/18	NEXT MEETING	
63/18/01	The next meeting would take place on 18 October 2018 at 10.00 am.	
64/18	ANY OTHER BUSINESS	
64/18/01	Members were informed that the ADA AGM and Annual Conference would take place on 14 November 2018 and members would receive details via email from the Chief Executive's PA.	MEC/CC
65/18	OPEN FORUM: TO HEAR FROM ANY MEMBER OF THE PUBLIC, WITH LEAVE OF THE CHAIRMAN	
65/18/01	There were no Members of the Public present at today's meeting.	
66/18	CONSORTIUM MATTERS	
66/18/01	The unconfirmed minutes of the last Consortium Management Committee meeting held on 29 June 2018 were considered in detail and approved. Arising therefrom:	
66/18/02	Mr J F Carrick apologised to members that on this occasion none of the three Norfolk Rivers IDB representatives had been able to attend.	
66/18/03	Schedule of Paid Accounts	

ID Norfolk Rivers IDB, Minute	Action
<p>The WMA Schedule of Paid Accounts for the period 1 March 2018 to 31 March 2018 totalling £76,175.57, as approved at the Consortium Management Committee meeting on 29 June 2018, was considered in detail and adopted. There were no matters arising.</p>	
<p>66/18/04 Financial Report</p> <p>The WMA Financial Report for the period 1 April 2017 to 31 March 2018, as approved at the Consortium Management Committee meeting on 29 June 2018 was considered in detail and adopted by the Board. There were no matters arising.</p>	
<p>66/18/05 Issues for discussion at next CMC meeting</p> <p>There were no specific issues raised by Members that would require discussion at the next Consortium Management Committee meeting on 28 September 2018.</p>	
<p>67/18 CONFIDENTIAL BUSINESS</p>	
<p>67/18/01 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.</p>	
<p>68/18 CONFIDENTIAL MINUTES</p>	
<p>68/18/01 The confidential minutes of the meeting held on 24 May 2018 were considered in detail and approved. There were no matters arising.</p>	

A MEETING OF THE NORFOLK RIVERS IDB EXECUTIVE COMMITTEE WAS HELD IN THE CONFERENCE SUITE, BRECKLAND DISTRICT COUNCIL, ELIZABETH HOUSE, WALPOLE LOKE, DEREHAM, NORFOLK ON THURSDAY, 16 AUGUST 2018 AT 9.00 AM.

Elected Members	Appointed Members
* J F Carrick	Breckland DC
* M Little	* S G Bambridge
P D Papworth	South Norfolk DC
	* Dr N Legg
	BCKL&WN
	Mrs E Watson

Present (66%)

Mr J F Carrick in the Chair

In attendance:

Mr P Camamile (Chief Executive), Mr M Philpot (Project Engineer),
Mrs M Creasy (minutes) and Mrs C Cocks (minutes)

ID	Norfolk Rivers IDB: Executive Committee, Minute	Action
22/18	APOLOGIES FOR ABSENCE	
22/18/01	Apologies for absence were received from Mr P D Papworth, and Mrs E Watson.	
23/18	WELCOME AND INTRODUCTION	
23/18/01	Cheryl Cocks, Assistant to the PA to the CEO, was introduced to the Executive Committee.	
24/18	MINUTES OF THE LAST EXECUTIVE COMMITTEE MEETING	
24/18/01	The minutes of the last Executive Committee meeting held on 24 May 2018 were approved and signed as a true record. Arising therefrom:	
24/18/02	De-Maining Proposals (12/18/02)	
	The Chief Executive reported that the decision by Norfolk County Council (NCC) not to support de-maining relates to all rivers within Norfolk, including those entirely within the internal drainage districts. Concerns were raised whether councillors had been properly briefed by the EA who were leading on the de-maining proposal. It was agreed that Mr S G Bambridge would liaise with NCC to arrange a meeting	MEC/PJC/SGB

with the Leader of the Council, himself and officers of Norfolk Rivers IDB to endeavour to resolve NCC's concerns about the de-maining pilot study in Norfolk. RESOLVED that this be noted.

24/18/03 Governance Arrangements: Membership (12/18/03)

- (i) Members considered the relatively low 50% average recorded for members' attendance at Board meetings for the year 1 April 2017 to 31 March 2018. Members discussed DEFRA's current recommendations for large IDBs to have a maximum 21 members and smaller IDBs a maximum of 13 members and considered that since Norfolk Rivers IDB is considered a smaller board under current DEFRA guidelines, low attendance figures may lead to criticism of the Board and conjecture that it is keeping its membership artificially high, (current membership is 31). It was also noted that the Land Drainage Act gives a Drainage Board the right to remove an elected member from the Board following non-attendance for two consecutive meetings spanning a period of six months.
- (ii) Whilst Mr Bambridge voiced concern that a Board with 13 members may not provide a sufficient number of elected members, (6), to cover the expanse of the Norfolk Rivers Internal Drainage District, he did concur with the Chief Executive's suggestion that a smaller membership could resolve the issue of less than 100% attendance and would also provide potential to allocate individual members with 'portfolio holder' responsibility for various aspects of the IDB's business, for example, finance, environment, operations etc.
- (iii) It was agreed that the Chief Executive should provide a briefing paper on the reconstitution of the Board to reduce its membership, and to include in said brief the consideration of substitute members for the appointed membership and the continued co-option where relevant for the elected membership, which would be considered by the Executive Committee with a view to making recommendations to the Board. RESOLVED that this be noted.

PJC

24/18/04 Norfolk County Council Application C/5/2017/5007 for change of use from warehousing to waste processing or refuse derived fuel at former SPC Atlas Works, Weston Longville, Norwich (12/18/05)

Mr S G Bambridge informed the Committee that he had raised this application at the NCC Strategic Planning Committee where he had been advised that approval had been given for the industrial waste processing unit on the former SPC Atlas Works site.

ID	Norfolk Rivers IDB: Executive Committee, Minute	Action
<p>24/18/05 Collection of Drainage Rates (19/18/01)</p> <p>Members were pleased to note that the drainage rates currently outstanding for 2018/19 was only £3,047.</p>		
	<p>25/18 FINANCIAL REPORT 2018/19</p>	
<p>25/18/01 The Financial Report for the period 1 April 2018 to 30 June 2018 was considered in detail and approved, (a copy of which is filed in the Report Book). Arising therefrom:</p>		
<p>25/18/02 Debtors</p> <p>The Highland Water Contribution (HWC) of £26,471 outstanding from 2016/17 had now been paid. Given the continued difficulties encountered in the receipt of HWCs, members discussed the benefit of extending the Board's internal drainage district to its full hydrological catchment, which would negate the need for HWC. The Chief Executive recorded that the second reading of the Rivers Authorities and Land Drainage Bill, (a Private Member's Bill) was due in Parliament on 26 October 2018. This Bill, if enacted would allow drainage boards to extend to their full watershed catchment, helping with revaluing land at updated values. It was noted that DEFRA have indicated that they would support a desktop revaluation even if the Bill is not passed.</p>		
	<p>26/18 SCHEDULE OF PAID ACCOUNTS</p>	
<p>26/18/01 The Schedule of Paid Accounts for the period of 1 April 2018 to 30 June 2018 totalling £178,509.63 (a copy of which is filed in the Report Book) was considered in detail and approved. There were no matters arising.</p>		
	<p>27/18 COLLECTION OF DRAINAGE RATES</p>	
<p>27/18/01 Discussed earlier in the meeting as recorded in minute 24/18/05.</p>		
	<p>28/18 NEXT MEETING</p>	
<p>28/18/01 The next Executive Committee meeting would take place on Thursday, 18 October 2018 at 9.00 am.</p>		
	<p>29/18 ANY OTHER BUSINESS</p>	
<p>29/18/01 The Chairman requested that Norfolk Rivers IDB does not meet on 23 May 2019 as he was already committed to attend another meeting on that day.</p>		

OPERATIONS REPORT FOR PERIOD JUNE 2018 – AUGUST 2018

1 REVENUE MAINTENANCE WORKS

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

Board Machine

Recharge work for the Broads (2006) IDB – Note this machine is to be sold due to age and condition.

Contractor's Machine: (GDR Ltd)

<u>Bure:</u>	Oxnead, Buxton, Bylaugh Meadows, Aylsham,
<u>Wensum:</u>	Ringland, Morton Hall, Swanton Morley, North Elmham
<u>Upper Yare & Tass:</u>	Thuxton
<u>North Norfolk:</u>	Stiffkey

Handwork: NRIDB Operatives

Numerous sites across the whole of the district including:

Corpusty, Gunton, Buxton, Castle Acre

Our hand crew have also carried out:

- Quarterly checks of structures in Buxton and on the Dereham Stream (as well as before heavy rain forecasts);
- Monthly clearing of the weed screen at Fakenham Mill, as well as quay lane bridge and the footpath crossing upstream of Fakenham Mill.

1.2 Maintenance Construction Projects

Environment Agency Public Sector Co-operation Agreement (PSCA) Work

EA Main River Maintenance Work

This quarter we have submitted a programme of works for delivery this financial year. The EA are in the process of reviewing this and we hope to have it agreed shortly.

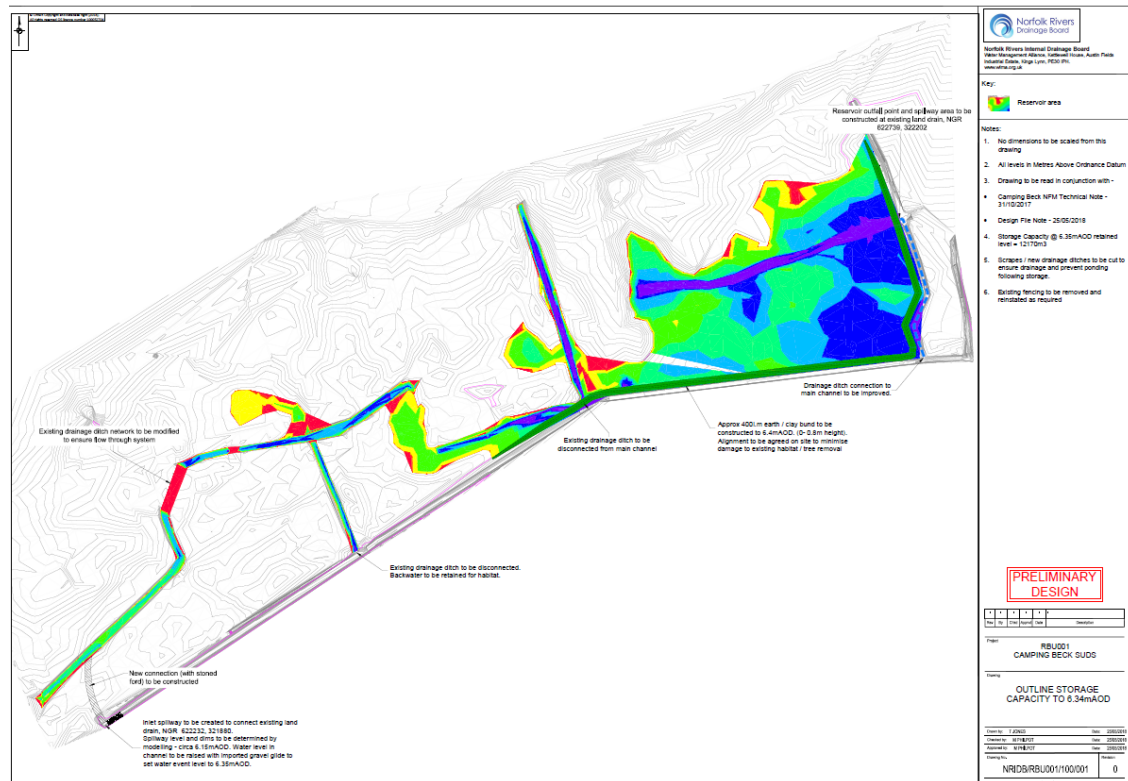
Works proposed are similar to last year and are in areas which benefit the drainage district.

Buxton – Slow the Flow project

The Environment Agency have funds available to use Natural Flood Management techniques for reducing flood risk locally. As part of this an area at Dudwick Hall in Buxton, adjacent to our main drain has been highlighted as a potential storage area for flood waters during certain events.

The NRIDB engineers have undertaken detailed surveying and modelling of the area and have then worked with the landowner to develop a scheme design, which is currently being agreed. The project will look to store circa 12,000m³ of water within the floodplain and to the release it slowly back to the river over time.

We hope to build the project in September, with NRIDB staff undertaking all construction and construction management.



Flood storage designs completed by IDB Engineers

Ingworth – Flood plain re-connection

We have been working with the EA and National Trust looking at the reconnection of the floodplain at Ingworth.

We have undertaken survey and design and are waiting on landowner approval, before starting on site.

Environment Agency Truxor Weedcutting Work

We have again been awarded the contract to manage the EA's weedcutting on a number of rivers using a specialist piece of plant. The work this year is reduced in scope from last year, but will see us delivering work across Norfolk on 5 different rivers.

Manor Farm, South-Repps

We have worked again with the Norfolk Rivers Trust at South Repps, where we have designed and built a silt interceptor to manage flows from an area of high run-off. The project comprised a number of innovative solutions to capture run-off and prevent it flooding both properties and the downstream River environment.

The works took 3 weeks to complete and had a value of c £30k.



2. HEALTH & SAFETY

No incidents this period

3. PLANT

Nothing to report this period.

4. CAPITAL SCHEMES

4.1 River Nar Restoration Schemes (WLMP)

Fish passage at Narborough

Detailed design is still to be produced prior to commencement of a tender process for the fabrication of the structure. Detailed designs are being held up whilst landowners agreement is sought for a design modification. Further delays could put the construction programme for 2018 at risk.

Castle Acre Common

We have now agreed where we can dispose of spoil generated from excavating the new channel. Detailed designs can now be produced for final approvals. Construction is planned for mid to late September.

A truxor weed cut is planned prior to construction to help lower water levels. High water levels are a significant risk to the project.

West Lexham Erosion repairs

Works have been carried out at West Lexham. We have stabilised one bank downstream of the culvert we reinforced and extended. This was achieved using locally sourced Alder. We have also stabilised the bed, and banks in the newly constructed bypass channel. Again using locally sourced Alder with the addition of rock rolls knitted together to ensure the bed will no longer erode.



Bank erosion repairs downstream of culvert



Bed, bank and erosion repairs in new bypass channel

4.2 Wensum Restoration Project

The final phase of the project has been approved and works are due to start in September, completed by *Five Rivers Contracting Ltd*, with site supervision and management completed by NRIDB Engineers.

The final phase is 6.7Km long and constitutes more restoration techniques, as implemented previously, to raise the bed of the drain and improve morphology.

The scheme has been linked into the Raynham Estate Countryside Stewardship Agreements with Natural England and represents a very positive example of cross government department working, to achieve the best for the environment and land management.

Works are expected to take 10 weeks to complete.

5. OPERATIONAL MATTERS

Elsing Culvert:

Further to the previous board report, the culvert at Elsing which takes water through our Swanton Morley system, was surveyed to establish condition.

This specialist survey was undertaken by a sub-contractor using a camera mounted ROV. The culvert was found to be a brick barrel culvert and is believed to date from the 18th Century. The condition of the culvert was found to be generally good, with some age related deterioration around mortar loss on some brickwork. The Upstream headwall is in a poor condition and will need to be replaced relatively soon.

The culvert is completely within the NRIDB area and does not pass under any main rivers or other ordinary watercourses. The culvert does pass under road and property infrastructure.

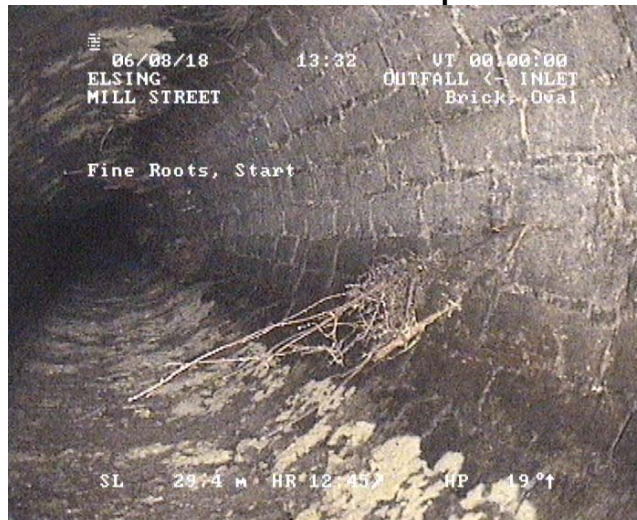
At present the culvert is un-adopted by the IDB, although our drainage system is reliant on it and uses it continuously.

The survey cost £6k and it is recommended that this is repeated every 2-3 years as a minimum. Although in a good condition, the culvert is old and the deterioration which is apparent will only get worse as time goes on. Therefore re-lining the culvert will be required at some point and cost estimates are currently being obtained for this work. Capital grant may be available for this, however this will need to be established following more detailed modelling, and is unlikely to cover costs in entirety.

Due to the reliance on the asset by the board we therefore consider that the asset should be adopted, giving the asset the protection of the bylaws and formal recognition required for future maintenance and operation.

Costs for lining and potential capital allowances available will also be explored further in the coming months.

Recommendation: The Board adopt the culvert into the existing IDB system



Elsing culvert survey

6. **HYDROLOGY – UK Overview** (extracts from <http://www.metoffice.gov.uk/climate/uk/summaries/2018>)

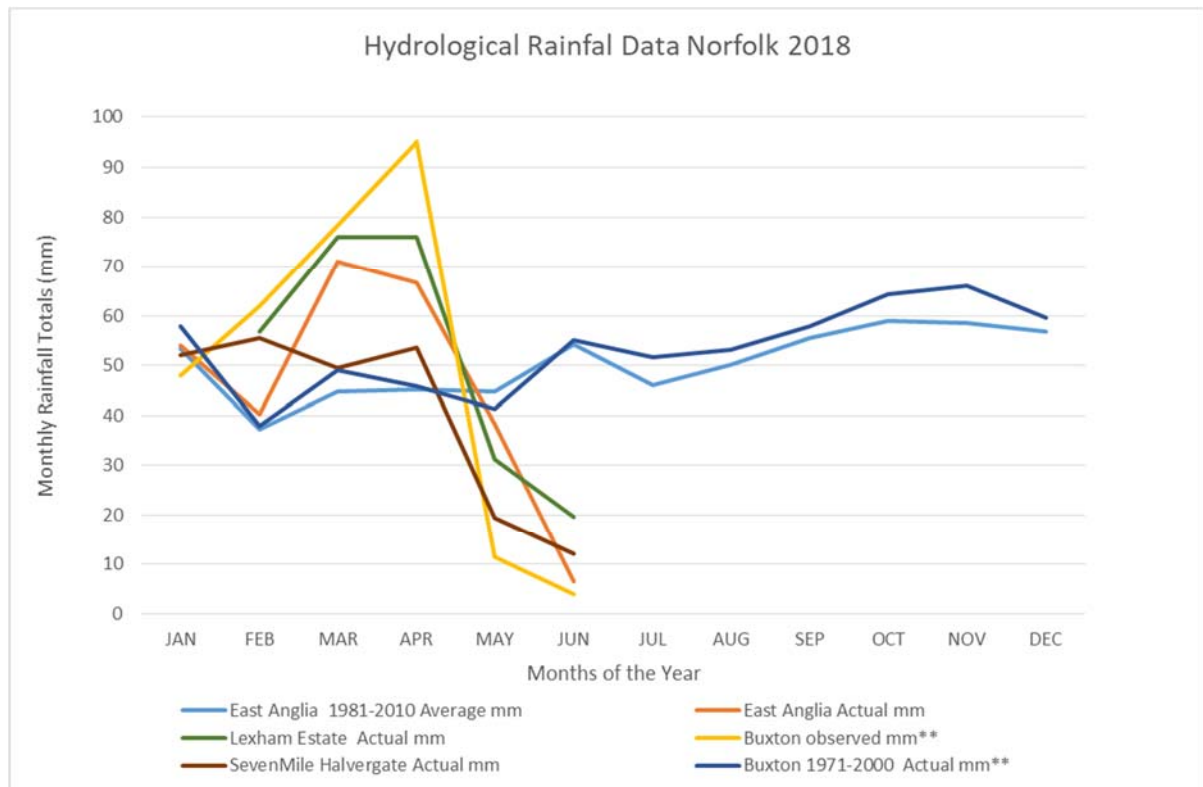
May began cool and unsettled with westerly winds, but it soon turned generally sunny and warm or even hot, and the hottest day of the spell coincided with the early May bank holiday. The period 10th-17th was generally cooler, but the second half was mostly warm and sunny away from eastern coasts, with mostly easterly winds. Thundery showers affected many areas during the last week.

The mean temperature for May was provisionally 1.7°C above the 1981-2010 long-term average, making it the equal warmest May (alongside 1992 and 2008) in a series from 1910. Rainfall was 79% of average and it was generally drier than average in the north, the south-west, and the east of East Anglia but the Midlands and south-east mostly had near-average rainfall. Sunshine was 136% of average, making it the second sunniest May (after 1989) in a series from 1929.

June was mostly warm and quite settled until the 12th, although often cooler near the east coast, with variable amounts of cloud and some scattered thundery showers at times, these mainly in the north. There was an unsettled westerly spell from the 13th to

20th, and it was notably windy on the 14th, but rainfall amounts were small in southern areas. High pressure brought dry and very sunny and increasingly hot weather by day from the 21st onwards, while it was relatively cool by night.

The mean temperature for June was provisionally 1.8 °C above the 1981-2010 long-term average, making it the 4th warmest June in a series from 1910. With just 24% of average rainfall it was provisionally the 3rd driest June in a series from 1910, and it was particularly dry in the south where some regions had their driest June for over 100 years. Sunshine was 136% of average, making it provisionally the 5th sunniest June in a series from 1929, and it was especially sunny in the north-west.



Rainfall:

	East Anglia 1981-2010 Average mm	East Anglia Actual mm	Lexham Estate Actual mm	Buxton observed mm**	Seven Mile Halvergate Actual mm	Buxton 1971-2000 Actual mm**
JAN	53.4	54.1		47.9	52	57.8
FEB	37.2	40.3	56.9	62	55.6	38
MAR	44.8	70.9	75.9	78.3	49.6	49
APR	45.3	66.7	75.9	95.1	53.6	45.8
MAY	44.8	38.4	31.2	11.5	19.4	41.4
JUN	54.3	6.5	19.6	4	12.2	55.2
JUL	46					51.6
AUG	50.1					53.2
SEP	55.6					57.8
OCT	59					64.3
NOV	58.5					66.1
DEC	56.8					59.5

* <http://www.metoffice.gov.uk/climate/uk/summaries/2018>

** <http://www.buxton-weather.co.uk/weather.htm#daily>

7. STAFF/WORKFORCE –TRAINING/EDUCATION

Catastrophic Bleed First Aid training 07 June 2018

Attended by; Paul George, Matthew Philpot, Thomas Jones, and operatives

Norfolk FWAG 04 July 2018

Attended by Paul George who presented a section of river restoration opportunities, techniques and funding.



8. COMPLAINTS/ENFORCEMENT

Nothing to report this period.

PLANNING REPORT

1. SUMMARY OF ACTIVITY IN REPORTING PERIOD

- 1.1 This planning report covers the reporting period 17 May 2018 to 8 August 2018. There is currently 1 consent application 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.

<i>Application Type</i>	<i>Number</i>
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:	0
Total:	1

- 1.2 The current status of these applications are;

<i>Application Type</i>	<i>B3 - TFW</i>	<i>B3 - SW</i>	<i>B4/S23</i>	<i>B10</i>	<i>Total</i>
Awaiting further information from the applicant:	0	0	0	0	0
Awaiting applicants acceptance of conditions:	0	1	0	0	1
Being processed by officers:	0	0	0	0	0
To be determined by the Board in this report:	0	0	0	0	0
Total:	0	1	0	0	1

- 1.3 As highlighted by the table immediately above there are no consent applications requiring consideration by the Board in this report.

2. DELEGATED CONSENTS DETERMINED

During this reporting period, the following 6 consents under the Land Drainage Act 1991 and Board's Byelaws have been determined by Officers in accordance with their delegated authority.

<i>Application Type</i>	<i>Number</i>
Byelaw 3 (B3) – Discharge of Treated Foul Water (TFW):	0
Byelaw 3 (B3) – Discharge of Surface Water (SW):	2
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:	4
Total:	6

<i>Case Ref.</i>	<i>Case Sub-type</i>	<i>Parish</i>	<i>Location / Site Name</i>	<i>Description of Proposal</i>	<i>Determination</i>
17_00508_9_C	Byelaw 3 Surface Water	Trowse With Newton	Land North Of A146 And East Of White Horse Lane Trowse Norfolk	Proposal to discharge surface water from residential development of 98 dwellings and school	Granted
18_00545_3_C	Byelaw 10 Exemption	Foulsham	Guestwick Road, Dereham, Norfolk	Proposal to directional drill a potable water main beneath an adopted drain	Granted
18_00363_C	Byelaw 10	Castle Acre	River Nar south of WRC	Proposal to directional drill a foul water main beneath an adopted drain	Granted
18_00367_C	Byelaw 10 Exemption	Swafield	Swafield, North Walsham, NR28 0RH	Proposal to directional drill a 110mm pipe beneath an adopted drain	Granted
18_00387_C	Byelaw 10	Ingworth	Ingworth Natural Flood Management Scheme	Proposal to install monitoring stations	Granted
18_00369_C	Byelaw 3 Surface Water	Wymondham	Harts Farm Road	Proposal to discharge surface run-off from 7,420m ² 3G All Weather Football Pitch at 2.5 l/s	Consent not required

3. PLANNING COMMENTS

Officers have provided comments on the following applications which were either in or could impact on the Boards Internal Drainage District:

<i>Planning App Ref</i>	<i>Parish</i>	<i>Location / Site Name</i>	<i>Major / Minor Development</i>	<i>Stage of Planning</i>	<i>Description</i>
20170594	Foulsham	Land to West Claypit Road	Major	Full	Demolition of Builders' Yard & Erection of 11 No Dwellings with Associated Access
C/5/2017/5007	Weston Longville	SPC Atlas Works, Norwich Road, Lenwade, Norwich	Major	Full	Change of use warehousing to a Sui Generis use for waste processing and the production of refuse derived fuel (RDF)
3PL/2015/1180/O	Narborough	Land to the west of Chalk Lane	Major	Outline	Erection of up to 40 dwellings
DE21/18/0010	Roughton	Land to the east of, Norwich Road	Major	Pre-Application	Outline proposal for residential development for up to 50 dwellings with associated roads, drainage ponds, landscaping and public open space
3PL/2018/0154/F	Narborough	Narborough Road, Pentney	Major	Full	Use of site for caravans to be occupied for residential purposes (for three year period) to include the variation of conditions to the previously approved caravan site

Planning App Ref	Parish	Location / Site Name	Major / Minor Development	Stage of Planning	Description
20181074	Buxton with Lammas	Skeyton Road	Minor	Full	Two Storey Rear Extension & Single Storey Front Extension
3PL/2018/0595/F	Billingford	Elmham Road	Minor	Full	Demolition of existing barns and construction of new single-storey dwelling and associated parking.
3PL/2018/0677/F	North Elmham	Larch Grove, North Elmham	Minor	Full	New design & layout for plots 1 & 3 only erection of 2 no dwellings
2018/1492	Cringleford	Land To The Rear Of 9 Harmer Crescent	Minor	Full	Proposed new dwelling and associated external works

4. ENQUIRIES

There has been 1 enquiry received during the reporting period, outlined below;

Case. Ref.	Case File Sub-type	Parish	Description
18_00379_Q	About Infrastructure	North Walsham	Enquiry regarding Board's interest in Marsh and drains adjacent to Bacton Wood Lock

5. MARTHAM DEPOT SITE OFFICE REFURBISHMENT

As per the last meeting the Martham Depot site office is currently undergoing refurbishment with the aim of locating planning and regulatory staff on site. As part of this process the site facilities have been assessed. This has led to the identification of some statutory health and safety requirements that now need to be met. These include the refurbishment of some of the on-site utilities including foul drainage and electrical supply.

The foul drainage requires the replacement of the existing inaccessible septic tank served by French drains. The new treatment plant will discharge a high quality treated foul water directly to the watercourse on site, however, it does require planning permission. As such a planning application has been submitted to Great Yarmouth Borough Council to allow the foul drainage to be relocated and the new system installed. The planning application (06/18/0278/F) is due to be determined by 15 August 2018.

The internal office refurbishment has progressed significantly since the last Board meeting. The internal works are now complete (including the fitting of a kitchen) with the remaining furnishings due to be delivered prior to the Board Meeting.

6. FEES ASSOCIATED WITH CONSENTS GRANTED

There has been 1 fee invoiced and paid during the reporting period. This represents 100% of a surface water development contribution and is detailed below;

Case ref.	Site	Amount (no VAT)	Date invoiced	Paid?	Reason
17_00508_9_C	Land North Of A146 And East Of White Horse Lane Trowse Norfolk	£29,935	31/05/2018	Yes	100% of a surface water discharge contribution (1.9 ha of additional impermeable surface – attenuated using complex flow control).

7. SURFACE WATER DEVELOPMENT CONTRIBUTION RATE: Summary of the 2018 review

- a. As previously reported at the Board meetings, a detailed review of the Surface Water Development Contribution (“SWDC”) rate has been carried out over recent months. Below is a summary of its scope and key findings.
- b. **What are SWDCs?** A SWDC is a charge that an Internal Drainage Board can require developers to pay as a condition of consenting the discharge of surface water from new developments into the Boards drainage systems (whether occurring directly or indirectly).
- c. **What is the current rate and methodology?** The SWDC rate for the financial year 2018-19 is currently charged at a rate of £77,800.00 per impermeable hectare for un-attenuated direct discharge to the Internal Drainage District. This value was originally based on the cost (in 2009) of constructing a retention basin to cater for the run-off from an impermeable area of 1 hectare in the 1 in 100 year plus climate change event, where discharge was restricted to the Greenfield rate. Where discharge is restricted, 6 percentage bands are used to pro-rata the charge.
- d. **What is the aim of the review?** To ascertain if the rate currently being used is still valid, and to investigate if changes are needed to the current charging system. In developing the 2018 approach to SWDCs IDB officers have, in general, sought to update the 2009 methodology and to avoid the development of an entirely new untested concept.
- e. **Who has undertaken the review?** The review has been undertaken internally by IDB officers. The consultants Peter Brett Associates were commissioned to undertake an independent review of the proposed methodology of which they were positive. A further

independent legal review by Jonathan Moffat, QC was also sought and this broadly supported both the legal justification of the charge and the updated methodology albeit with recommendations on the detail to be presented to the Board.

f. **What are the changes between the 2009 methodology and the 2018 methodology?**

- Changes to reflect updates in Government policy: In seeking to update the SWDC methodology officers have sought to incentivise developers to comply with more recent government guidelines in respect of Sustainable Drainage Systems (“SuDS”), whilst still ensuring the Board has access to income from accepting surface water discharges into the drainage system.
- The costs of constructing the retention basin have been updated to reflect changes to the design and build and to reflect the need for maintenance:
 - The side slopes of the basin have been steepened to be more economic in terms of site area. This has reduced the surface area of the basin and excavated volume.
 - The width of the access strips around the basin has been increased to 9m on all four sides.
 - The land purchase rate has been increased from £200,000/Ha to £234,750/Ha, based on figures recently obtained from a local valuer. The rate used is the average of the upper limit for land with development potential, and the lower limit of development land with outline planning consent.
 - The construction costs have been increased to reflect current rates.
 - An allowance for fencing around the basin and access strips has been made for Health and Safety reasons.
 - An allowance for design and consultancy fees has been included.
 - Maintenance costs have been included as this would be an on-going cost associated with the detention basin option. For the purposes of this calculation, the maintenance costs have been included for a 30 year period, discounted back to present value.
- A new SWDC rate has been determined to reflect these changes in cost: The new un-attenuated rate is £117,131 per impermeable hectare, an increase of 50% on the current rate.
- The 6 charging bands have been revised into 22 charging bands: IDB officers considered the current charging bands as too wide as they can be seen as unfair on those developments achieving greater restriction of the discharge rate. As such;
 - The percentage charging bands for partially restricted discharges have been narrowed so that the charge aligns more closely with the level of restriction, and a charging band below greenfield run off rate has been introduced to take account of the additional volume of water that the Board would have to deal with, even if the discharge rate can be restricted to greenfield or less.
 - The charging position with regard to high level overflows from soakaway systems has been addressed.
 - The issue of the current single rate not being appropriate for all sizes of development has been addressed by incorporating a variable rate depending on the size of the impermeable area being drained. Economies of scale can therefore be taken in to account and the development contribution rate per hectare for larger developments reduces accordingly.

g. **How will this impact the Board?** To identify the impact that the change in SWDC rate could have a comparison was undertaken using actual SWDC figures taken from

the South Holland IDB over the last 2 years. It is clear from this comparison and from the wider review that the biggest factor influencing the SWDC rate is the calculation of the land value used. It should be noted that although the revised rate reflects up to date figures, the Board should be aware of the risk of opposition from developers over such a significant increase.

- h. **Recommendation:** Following consideration of this summary and the main report into the 2018 review of the SWDC (included as Appendix A), it is recommended that;
- The Board adopt the revised banding structures, in terms of variable contribution rate against impermeable area being discharged, and proportional contribution charges depending on level of discharge restriction in place. This change should come into force from 1 October 2018. Transitional arrangements would mean applications being determined during this change would be processed under the contribution rate applicable at the time the application was validated.
 - The rates be increased by inflation annually, and a more in-depth review to be undertaken on a 5 yearly basis.

G.R. BROWN – FLOOD AND WATER MANAGER
C.H. BRADY – FLOOD AND WATER OFFICER

South Holland IDB - Review of Surface Water Development Contribution charges – 2018

(to be read in conjunction with the WMA Review of the current rate charged for Surface Water Development Contributions – July 2009)

Aim:

The aim of this review is to ascertain if the current rate is still representative of the actual costs associated with the provision of on-site storage capacity, and to investigate if changes are needed to the current charging system. The review will look at the current charges (based on the previously agreed 2009 report), and propose changes to the charging bands, and an updated assessment of the overall rate.

Current charges:

The current Surface Water Development Contribution fee is charged at a rate of £77,800 per impermeable hectare (reviewed annually) for un-attenuated direct discharge to the drainage system, whether it be to a private watercourse, third party watercourse, or direct to an IDB watercourse, as long as at some point the water enters the IDB system. This was originally based on the cost of constructing a retention basin to cater for the 1 in 100 year plus climate change run-off from an impermeable area of 1 hectare, with discharge restricted to green field rate.

Where discharge is restricted, rather than un-attenuated, percentage bands are used to pro-rata the charge. The current charging bands are as follows:

Discharge rate (litres/second/impermeable hectare)	% of full contribution rate
Below 1.4	0
1.4 to 25	20
25.01 to 50	40
50.01 to 75	60
75.01 to 100	80
100.01 to un-attenuated	100

1.4 l/s/ha is regarded in IDB districts as “green field run-off rate” as this is the empirical flow rate used originally for agricultural flow when the IDB systems were designed. In the current banding

system there is no charge below this rate, although it is acknowledged that even if flow rates are kept at or below this level, there is the potential for an additional volume of water to enter the drainage system, as an impermeable surface will create total run-off compared to permeable surfaces where a certain amount will be retained in the ground through soakage.

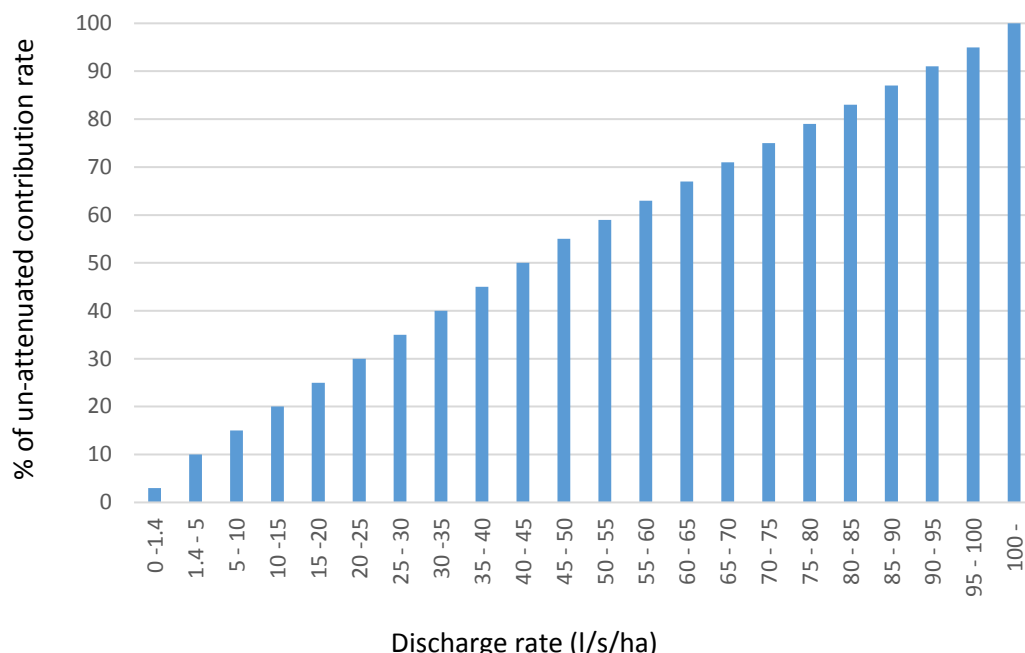
Proposed changes to charge banding:

It is considered that the current charging bands are too wide. For example, currently a discharge rate of 25 l/s/ha generates the same development contribution fee as discharge at the green field run-off rate of 1.4 l/s/ha, which seems unfair on those achieving greater restriction to discharge rate. It is recommended that the bands be broken down in to smaller ranges to allow the charge to vary more, and align more closely with the discharge rate.

There is also concern that on large sites, where an attenuated discharge of less than green field runoff can be achieved, no allowance is made in the charging bands for possible additional volumes that will result from run-off from an impermeable surface, or other costs associated with an outfall being made directly to the drainage system. It is therefore proposed to introduce a minimal percentage charge to cover this of 3% for discharge rates less or equal to 1.4 l/s/ha. This can be seen, as a very minimum, as a connection charge.

The proposed revised banding system is as follows:

Discharge rate, Q (litres/second/impermeable hectare)	% of full contribution rate
$Q \leq 1.4$	3
$1.4 < Q < 5$	10
$5 \leq Q < 10$	15
$10 \leq Q < 15$	20
$15 \leq Q < 20$	25
$20 \leq Q < 25$	30
$25 \leq Q < 30$	35
$30 \leq Q < 35$	40
$35 \leq Q < 40$	45
$40 \leq Q < 45$	50
$45 \leq Q < 50$	55
$50 \leq Q < 55$	59
$55 \leq Q < 60$	63
$60 \leq Q < 65$	67
$65 \leq Q < 70$	71
$70 \leq Q < 75$	75
$75 \leq Q < 80$	79
$80 \leq Q < 85$	83
$85 \leq Q < 90$	87
$90 \leq Q < 95$	91
$95 \leq Q < 100$	95
$100 \leq Q$ to un-attenuated	100



Treatment of overflows

Where the discharge pipe is situated at such a level as to be continually draining the SuDS, the applicable charging band can be quite easily determined from the above table. There has however in the past been some difficulty in determining the charging band if a discharge pipe is installed as a high level overflow from a soakaway system, and as such flows infrequently. It is therefore proposed that, in future, overflows from such SuDS should be treated as shown below:

Scenario	Charging band to be used
High level overflow from infiltration type SuDS (soakaway), where SuDS has been designed with sufficient capacity to cater for 1 in 100 year plus climate change event (taking in to account wet weather condition ground water level)	10%
High level overflow from infiltration type SuDS (soakaway), where SuDS has insufficient capacity to cater for 1 in 100 year plus climate change event (taking in to account wet weather condition ground water level)	% obtained from table above (minimum 10%)

Note: Infiltration type SuDS will only be allowable in certain ground conditions which fulfil the requirements of Building Research Establishment Digest 365 (BRE 365) – Soakaway design.

Updated assessment of the overall rate:

The un-attenuated Surface Water Development Contribution rate we are currently using was first calculated in 2009, at a value of £60,675 per impermeable hectare, (Reference – Water Management Alliance. Review of the current rate charged for Surface Water Development Contributions. July 2009), and has been increased by inflation on an annual basis since that time, to the current value of £77,800.

The Surface Water Development Contribution rate per impermeable hectare, for un-attenuated discharge into the drainage system, is based on the cost of the alternative option open to the developer, i.e. building a retention basin to cater for an area of one hectare of impermeable surface and restricting discharge down to green-field rate into the drainage system.

The same assumptions used in the original calculation have been carried forward, with the following exceptions:

- The side slopes of the basin have been steepened from 1 in 4 to 1 in 2 to be more economic in terms of site area. This has reduced the surface area of the basin at ground level to 0.1125Ha, and the excavated volume to 1,400m³.
- The width of the access strips around the basin has been increased to 9m on all four sides. This has increased the site area required to accommodate the basin to 0.2709Ha.
- The land purchase rate has been increased from £200,000/Ha to £234,750/Ha, based on figures recently obtained from a local valuer. The rate used is the average of the upper limit for land with development potential (£49,500/Ha), and the lower limit of development land with outline planning consent (£420,000/Ha).
- The construction costs have been increased to reflect current rates.
- An allowance for fencing around the basin and access strips has been made for Health and Safety reasons.
- It has been suggested that an allowance for design and consultancy fees should be included.
- It has also been suggested that maintenance costs should be included as this would be an on-going cost associated with the detention basin option. For the purposes of this calculation, the maintenance costs have been included for a 30 year period, discounted back to present value.

As the assumptions regarding flow have not changed, the capacity of the basin remains unchanged at 861m³ for a 1 in 100 year event (plus 10% increase in rainfall for climate change, resulting in approximately 20% increase in flow). The basin is still designed to be 1.5m in depth, with 0.5m of freeboard, thereby providing a water storage depth of 1m. It should be noted that due to recent increases in recommended climate change allowances, the rate used is now at the

lower end of the scale. It is not however proposed to increase this, due to the level of uncertainty in predictions, and to build robustness in to the Board's case that, if challenged by a developer, it can be shown that reasonable steps have been taken to not overestimate the rate.

As can be seen below, the biggest factor in the outcome of this calculation is the land value used, as this has by far the most significant effect on cost. Fluctuations in value, or perceived value, if for instance the area has other uses such as public open space, could therefore have a significant impact on the calculation. The use of these updated figures in the calculation results in an increase in the current rate of approx. 50%. Although these figures are more up to date, the Board should be aware of the risk of opposition from developers over such a significant increase.

Cost breakdown:

	2009 costs (£)	2018 costs (£)
Land Purchase	53,200 (based on 0.266Ha at £200,000/Ha land value)	63,617 (based on 0.271Ha at £234,750/Ha land value)
Excavation	2,070 (inc 15% VAT)	5,040 (inc 20% VAT)
Hydro-brake and pipework	4,025 (inc 15% VAT)	5,300 (inc 20% VAT)
Erosion protection etc	1,380 (inc 15% VAT)	1,800 (inc 20% VAT)
Health and Safety fencing	-	13,992 (inc 20% VAT)
Total	60,675	89,749
Design and consultancy fees	-	13,462
Maintenance (based on annual costs over 30yr period discounted to present value)	-	13,920 (inc 20% VAT)
Grand Total	60,675	117,131

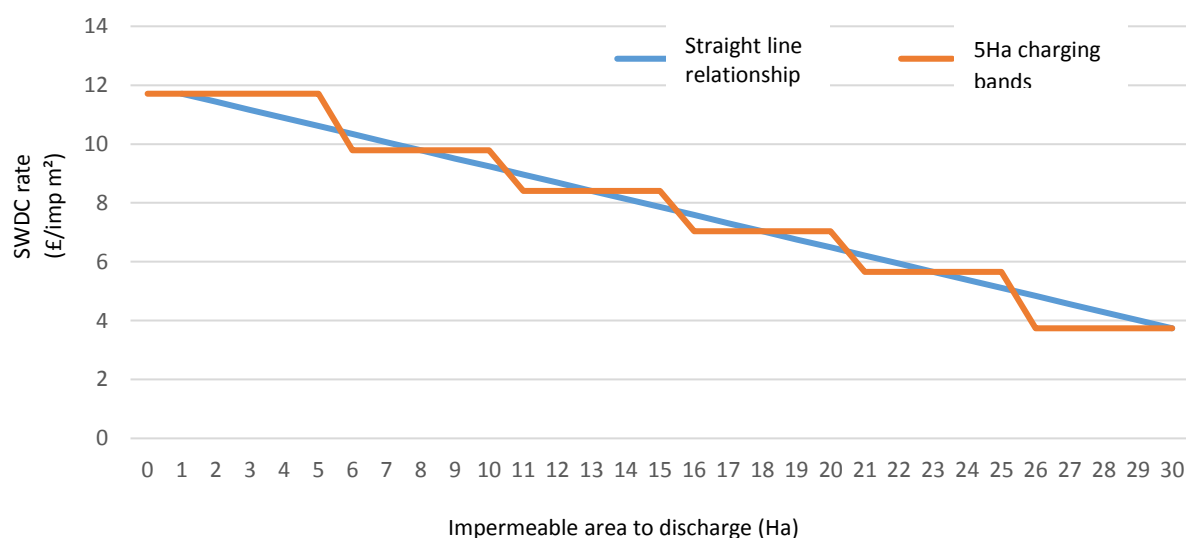
Variance of Surface Water Development Contribution Rate with area of Impermeable surface:

A recognised problem with the current methodology for calculating the Surface Water Development Contribution rate is that as it uses an impermeable area of 1 hectare as a basis for the calculation the rate quickly becomes excessive for sites with larger impermeable areas. Taking this in to account, a comparison of costs is shown below for constructing retention basins for impermeable areas of 1ha and 30ha.

	Costs associated with constructing retention basin to cater for impermeable area of 1 ha (£)	Costs associated with constructing retention basin to cater for impermeable area of 30 ha (£)
Land Purchase	63,617 (based on 0.271Ha at £234,750/Ha land value)	794,957 (based on 3.542Ha at £234,750/Ha land value)
Excavation	5,040 (inc 20% VAT)	132,196 (inc 20% VAT)
Hydro-brake and pipework	5,300 (inc 20% VAT)	12,000 (inc 20% VAT)
Erosion protection etc	1,800 (inc 20% VAT)	9,000 (inc 20% VAT)
Health and Safety fencing	13,992 (inc 20% VAT)	45,738 (inc 20% VAT)
Total	89,749	993,891
Design and consultancy fees	13,462	50,000
Maintenance (based on annual costs over 30yr period discounted to present value)	13,920 (inc 20% VAT)	77,880 (inc 20% VAT)
Grand Total	117,131	1,121,771
Rate/impermeable m²	11.71	3.74

If a straight line relationship is assumed between these two scenarios, the rate/imp m² against impermeable area in hectares is as shown on the graph below. 5ha bands are also shown, that could be used for differential rates for different sizes of impermeable area.

Relationship between Surface Water Development Contribution rate and area of impermeable area being catered for



These charging bands would therefore equate to the following:

Impermeable area, A, discharging (ha)	Surface Water Development Contribution rate (£/m ²)
A ≤ 5	11.71
5 < A ≤ 10	9.79
10 < A ≤ 15	8.41
15 < A ≤ 20	7.04
20 < A ≤ 25	5.66
25 < A	3.74

Comparison of charges made over the last two year:

As a means of showing what differences these proposed changes would make, the table below shows the Surface Water Development Contribution Fees charged over the last two year period, and the charges, based on the rate that was in effect at the time, compared with what they would be now using the revised rate/charging bands.

Site and discharge rate (Consents issued over the last 2 years)	Charges made using rate/banding in force at the time of consent			Comparison of what this charge would be using the proposed new rate/banding	
	% band	Rate (£/Ha)	Charge (£)	% band	Charge (£)
Holbeach Hurn. Surface water from 2,800m ² area restricted to 7l/s. Outfall in to private watercourse.	20	74,000	4,144.00	15	4,919.50
Development off Old Brewery Lane, Long Sutton. For 184m ² impermeable area created with unrestricted discharge into the Board's system.	100	74,000	1,361.60	100	2,155.21
Development at Church Lane, Moulton, in which an impermeable area of 286m ² was created with unrestricted discharge into the Board's Moulton River watercourse.	100	74,000	2,116.40	100	3,349.95
Development at Station Road, Moulton, in which an impermeable area of 96m ² was created with unrestricted discharge into the Board's Moulton River watercourse.	100	74,000	710.40	100	1,124.46

Proposed extension development creating an impermeable area of 6,094m ² with unrestricted discharge into the Board's Oundle Vicarage Drain.	100	74,000	45,095.60		100	71,379.63
Proposed new build property at Welbourne Lane North, Holbeach. 133m ² of impermeable area with unrestricted discharge to Holbeach New River.	100	74,000	984.00		100	1,557.84
Kellett Gate, Spalding. 1,0358.8m ² of impermeable area discharging to the Board's Half Mile Dyke at 28/l/s/ha	40	74,740	30,968.66		40	48,533.46
Development at Cross Street/Kirkgate, Whaplode. 124m ² of impermeable area with unrestricted discharge to the Board's Whaplode Village Drain.	100	74,740	926.80		100	1,452.42
Development off Back Gate, Cowbit. 6,745m ² of impermeable area discharging to the Board's Mill Dyke pipeline at 20/l/s/ha	20	74,740	10,082.43		30	23,701.46
Development at High Road, Weston. An impermeable area of 660m ² with unrestricted discharge into a riparian watercourse.	100	74,740	4,932.84		100	7,730.65
Development at Fleet Road, Holbeach. An impermeable area of 871m ² with unrestricted discharge into the Board's Washway Road pipeline/watercourse.	100	74,740	6,509.85		100	10,202.11
Development off Church Street, Holbeach. An impermeable area of 1,820m ² with a restricted discharge rate of 5 litres per second (27.5 litres per second per hectare), discharging in to Holbeach Town Tunnel.	40	74,740	5,441.00		40	8,527.14
Road improvement scheme on the junctions of the A151 and A151/A17. An additional impermeable area of 5,735m ² with unrestricted discharge into the Board's Holbeach New River.	100	74,740	42,863.39		100	67,174.63
Property at Fleet Road, Fleet. For unrestricted surface water discharge into the Board's Washway Road watercourse from the existing	100	75,500	453		100	702.79

property and extension, an impermeable area of 60m ² .					
Proposed development adjacent at High Road, Weston. An impermeable area of 483m ² with unrestricted discharge into a private watercourse.	100	75,500	3,646.65	100	5,657.43
Proposed development off High Road, Whaplode. For surface water discharge in to the Board's Millars Lane and Turnpike Drain. For unrestricted discharge from an impermeable area of 1,126m ² , and for an impermeable area of 1,457m ² discharge restricted acting as an overflow.	100 20	75,500 75,500	8,501.30 2,200.00	100 10	13,188.95 1,706.60
For a development off West Cob Gate, Moulton. An impermeable area of 8,930m ² discharging in to the Board's system. Flow rate restricted to 2.66 litres per second for the impermeable area (2.98l/s/ha).	20	75,500	13,484.30	10	10,459.80
Total over 2 year period			184,422.22		283,524.03

Recommendation:

It is recommended that:

- The Board adopt the revised banding structures, in terms of variable contribution rate against impermeable area being discharged, and proportional contribution charges depending on level of discharge restriction in place. This change should come into force from 1 October 2018. Transitional arrangements would mean applications being determined during this change would be processed under the contribution rate applicable at the time the application was validated.
- The rates be increased by inflation annually, and a more in-depth review to be undertaken on a 5 yearly basis.

Impermeable area, A, discharging (ha)	Surface Water Development Contribution rate (£/m²)
A ≤ 5	11.71
5 < A ≤ 10	9.79
10 < A ≤ 15	8.41
15 < A ≤ 20	7.04
20 < A ≤ 25	5.66
25 < A	3.74

Discharge rate, Q (litres/second/impermeable hectare)	% of full contribution rate
$Q \leq 1.4$	3
$1.4 < Q < 5$	10
$5 \leq Q < 10$	15
$10 \leq Q < 15$	20
$15 \leq Q < 20$	25
$20 \leq Q < 25$	30
$25 \leq Q < 30$	35
$30 \leq Q < 35$	40
$35 \leq Q < 40$	45
$40 \leq Q < 45$	50
$45 \leq Q < 50$	55
$50 \leq Q < 55$	59
$55 \leq Q < 60$	63
$60 \leq Q < 65$	67
$65 \leq Q < 70$	71
$70 \leq Q < 75$	75
$75 \leq Q < 80$	79
$80 \leq Q < 85$	83
$85 \leq Q < 90$	87
$90 \leq Q < 95$	91
$95 \leq Q < 100$	95
$100 \leq Q$ to un-attenuated	100

For clarity, a worked example is shown below:

Calculation of the Surface Water Development Contribution Fee for a site with, for example, 2.5ha of impermeable surface discharging to a watercourse at a restricted rate of 25 litres/second.

- Firstly establish the charging band the impermeable area will fall in to.
The 2.5ha impermeable area will fall in the $A \leq 5$ ha band, so the rate that will apply is £11.71/m².
- Next look at which proportional charge band the discharge will fall within due to the restricted flow.
25 litres/second over 2.5ha equates to 10 litres/second/impermeable hectare.
This falls in the $10 \leq Q < 15$ band so the proportional charge will be 20%.
- The Surface Water Development Contribution Fee due will therefore be:

$$\begin{aligned}
 \text{Fee} &= \text{rate (£/m}^2\text{)} \times \text{area (m}^2\text{)} \times \text{proportional percentage (\%)} \\
 &= 11.71 \times 25000 \times 0.20 \\
 &= \text{£58,550}
 \end{aligned}$$

NORFOLK RIVERS IDB ENVIRONMENTAL REPORT – August 2018

The Environmental Team continues to facilitate maintenance and capital projects undertaken throughout the NRIDB area. The following information pertains to environmental work carried out for the Norfolk Rivers IDB involving the Environmental Manager (EM) and/or the Environmental Officers (EOs), from the 30 April 2018 – 05 August 2018.

1. INFORMATION FOR THE BOARD

1.1 Giant Hogweed Control Projects 2018

During the week beginning 18 June Paul Sims, Native Landscapes contractor, visited the sites where Giant Hogweed was previously treated to ensure that it had been successful. There were no flowering plants where they were treated and any small plants that are now present can be treated in 2019. There were two flowering plants on the opposite bank where they could not be reached at the Cattery. The EO Helen Mandley contacted the cattery and the owners were able to cut them down.

The EO Helen Mandley and Paul George Operations Engineer had a site visit on 20 July to Emmanuel's Common, River Nar to ensure that the treatment of Giant Hogweed was successful. Only two flowering plants were found in this area and were cut down.

1.2 Integrated Main River Maintenance Programme

1.2.1 River Whitewater Sustainable Maintenance

The second phase of the sustainable maintenance project on the River Whitewater was undertaken at Clayhall Farm during the second half of May 2018. These works consisted of the installation of 3 gravel glides and 6 timber/gravel deflectors and follow on from the first phase of works completed in February and March 2018 and reported on in the last board report. These works contribute to the overall project aim to restore a more natural channel hydromorphology and reduce on-going maintenance needs. This phase of works was covered by the Environmental Permit that was received before the first phase was started.

1.2.2 River Wensum – Hawk and Owl Trust, Sculthorpe Moor

The Trust reported that there had been increasing levels of overtopping of the River Wensum bank in recent years and that this is leading to increased inputs of river water on to the reserve as well as more frequent substantial flooding. A scheme has been developed to reinstate low areas of bank as well as installing “leaky dams” along some sections. This will help prevent the worse of the overtopping whilst still allowing some water to enter the reserve during high river levels in order to maintain the river's connection to its floodplain. It is planned to commence in late September/early October. Assent will be needed from Natural England due to its location on the River Wensum SSSI.

1.3 PSCA Projects

1.3.1 River Tud – Badley Moor – River restoration

Funding has been secured from the Environment Agency for a river restoration scheme to be undertaken on the River Tud alongside Badley Moor SSSI. This section of river has been historically heavily dredged and maintained by the EA.

However, lack of maintenance over recent years has led to heavy silt deposits in the channel and areas of thick emergent vegetation and overgrown willows. The proposed scheme will consist of the installation of woody deflectors, bank re-profiling and reintroducing gravels into the channel from the large adjacent historic dredging mound. It is planned to commence in late October. Assent will be needed from Natural England due to the SSSI, and an Environmental Permit will be needed from the EA.

1.3.2 Camping Beck, Buxton, NFM

This is a Natural Flood Management project to reduce the peak water levels in Camping Beck and the River Bure by attenuating water flows. The Scheme will make a connection from Camping Beck to allow water to flow onto adjacent parkland during high levels. The parkland topography will be lightly re-profiled to create a continuous pathway for the water to flow downstream through the site and a small bund will be created to retain the water. The stored water will gradually be released back into Camping Beck through a water control structure at the downstream end. It will be delivered using EA funding.

1.4 The River Nar River Restoration Fund

The river restoration project preparation is ongoing, the route for the new river channel has been tweaked to suit the location of the gravel that was found in the test pits. The floodplain vegetation survey within the working area has been completed and is currently being written up as a report.

The EO, Helen Mandley, and Paul George, Operations Engineer, conducted a river survey by boat on the Nar between Castle Acre Common and West Acre Mill to check the extent of weed growth in the channel and whether it can be cut using a truxor. The outcome of this survey concluded that the weed needs cutting at various sections. This weed cut will help reduce the water levels in the common to enable river restoration to take place later this autumn.

A further meeting has taken place on 27 July with contractors 5Rivers on site to show them the river restoration plan on the ground and the access and egress to the site.

1.5 Norfolk Rivers Biosecurity Policy

Biosecurity is a hugely important process which needs addressing within the UK as a whole, to prevent the spread of Non-Native Invasive (NNI) species. These plants and animals are seriously impacting on native wildlife and costing landowners, ratepayers, public bodies and the UK government vast amounts of money in control/eradication programmes. In order to stem the flow of these NNI species at the local level, some basic biosecurity measures have been documented and recommended to be adopted by the IDB and contractors, if they are not already being done so.

In order to speed this process and help IDBs, ADA have recently pulled together a template for biosecurity measures. This template has been edited to suit the needs of the Norfolk Rivers IDB. A draft of the proposed document for adoption and ratification by the Board can be viewed in **Appendix A**.

2 Site Visits and Pre-Work Assessments

11 May 2018

EO, J Manners, undertook a pre-works breeding bird check ahead of vegetation clearance on the River Whitewater. A general environmental briefing was also given to the contractor.

21 May 2018

EO, J Manners, undertook a pre-works breeding bird check ahead of vegetation clearance on the River Nar restoration section for the Board's visit. The site was also walked with the contractor and routes and cutting specifications agreed.

25 June 2018

The EO, Helen Mandley, and Paul George, Operations Engineer, marked the new channel for the river restoration at Castle Acre Common on the River Nar. The EO, Helen Mandley, conducted a plant survey on the floodplain at Castle Acre Common.

6 June 2018

A scoping visit was made as part of the IMRMP to the Hawk and Owl Trust Reserve at Sculthorpe Moor near Fakenham. The EO (J Manners), IDB programme engineer (Tom Jones), the EA, Trust warden, and IDB contractor were present.

14 June 2018

The EM and the Project Engineer undertook a Scoping site visit to Dunton Patch and East Bilney to determine maintenance requirements.

21 June 2018

A scoping visit was made as to the River Tud at the Badley Moor SSSI. The EO, IDB Operations Engineer, the landowner and the EA Environmental Officer were present.

02 July 2018

The EO, Helen Mandley, had a site visit with Neil Marshall, hand operative on the River Wensum at Helhoughton to assess the amount of vegetation removal was needed in channel to continue the water vole mitigation.

9 July 2018

Newton Mill spraying

The EM and Operations Engineer met with a landowner on the River Nar to discuss spraying of Burr Reed which is causing water to back up near Newton Mill. An EA Herbicide spraying licence and SSSI assent has been applied for to deal with this problem.

The EO, Helen Mandley, had a site visit at Helhaughton on the River Wensum with contractors Wayne Risebrow and Mark Wheeler to show which areas of in-channel weed needs cutting with weed basket.

12 July 2018

The EO undertook a scoping visit with the IDB engineer to Camping Beck at Buxton to look at a proposed NFM scheme.

16 July 2018

The EO, Helen Mandley, scoped out three drains in the River Wensum catchment in preparation to carrying out maintenance.

20 July 2018

AM The EO, Helen Mandley, and Paul George, Operations Engineer, had a site visit to Castle Acre Common with the landowner of Narford Estate, Carlo Fountaine, to confirm the location of where spoil can be deposited during river restoration.

PM The EO, Helen Mandley, and Paul George, Operations Engineer, conducted a river survey by boat on the Nar between Castle Acre Common and West Acre Mill.

The EO, Helen Mandley, and Paul George, Operations Engineer, had a site visit at Emmanuels Common to check that the herbicide treatment on Giant Hogweed had been successful.

3 Meetings and Training

Environmental Team meetings have been held on 7th June 2018, 5th July 2018.

08 May 2018

The EO, Helen Mandley, attended the White Clawed Crayfish meeting at Norfolk Rivers Trust office, Bayfield Estate.

24 May 2018

The EO, Helen Mandley, attended the NRIDB board meeting at Dereham and then attended a site visit with the board to the River Nar restoration works at Newton and Emmanuels Common to see how they have developed over time.

26 June 2018

The EM attended the Anglian Catchment Natural Flood Management (NFM) Workshop in Isleham Cambs organised by the Environment Agency and attended by various local agencies and stakeholders. The workshop introduced the new NFM Evidence Base document produced by the EA for designing NFM projects and topic groups allowed practitioners to discuss other issues such as; the wider benefits of NFM, the importance of understanding flood risk impacts, monitoring and partnership working.

11 July 2018

The EO, Helen Mandley, and EM carried out ISO 14001 BAP assessments and internal auditing, Kings Lynn.

17 July 2018

The annual ISO 9001 and 14001 Quality Management System Audit was undertaken by the External auditor.

25 July 2018

Physical Habitat Training (Morph Tool).

A readily accessible River Habitat Survey has been developed in recent years to monitor physical changes in habitat in relation to invertebrate monitoring or river restoration. The EO, Helen Mandley, and EM attended a training event held in Norwich to understand how to use this physical habitat assessment technique with a view to using it to monitor small scale or large scale river restoration programmes initiated by the NRIDB.

25 July 2018

Staff Meeting

31 July 2018

The EM attended the Norfolk Crayfish Group (NCG) meeting, Holt, where there was some debate with an angler as to the merits or folly of undertaking Signal Crayfish Trapping. Much of the group were of the opinion that trapping is likely to cause more harm than good, which is a theory now being backed by academic research into the problem. What was evident from all present at the meeting was the feeling of wanting to do something positive for the WCC population and the ecology of Norfolk Rivers, although all present were

frustrated and down heartened by the seemingly unstoppable spread of the signal crayfish.

The NRIDB are continuing to fund crayfish surveys in NRIDB river systems again this year as part of their contribution toward benefiting White Clawed Crayfish and the NRIDB BAP. This is a valuable piece of work which is concentrating of tributaries of the River Bure between now till the end of October 2018.

The NCG continue to look for Ark sites in Norfolk, at which to try to maintain vestiges of the Norfolk population of WCC to prevent extinction of the Norfolk population.

3. Licence or assent applications made during this period

License / Assent / Habitat Regulations Assessment	Applied	Granted
Herbicide use on or near water SAC, Natural England SSSI assent for the River Wensum, Helhaughton	10 May 2018	15 May 2018
Herbicide use on or near water application to EA for the River Wensum, Helhaughton	10 May 2018	11 June 2018
U1 Waste exemption for moving spoil at Castle Acre	06 June 2018	06 June 2018
HRA and assent letter to carry out maintenance through a SSSI land parcel in the River Wensum catchment	03 July 2018	06 July 2018
NRIDB SMO Audit for North Elmham maintenance	09 July 2018	N/A
Notice of Entry letters sent out to landowners on the Bure catchment in preparation to carrying out crayfish surveys.	20 July 2018	N/A
Herbicide use on or near water application to EA for the River Nar, up and down stream of Newton Mill	26 July 2018	30 July 2018
Herbicide use on or near water Natural England SSSI assent for the River Nar, up and down stream of Newton Mill	26 July 2018	02 Aug 2018



Norfolk Rivers Internal Drainage Board

Biosecurity Policy

PURPOSE

This document sets out the Biosecurity Policy of Norfolk Rivers IDB. It covers activities undertaken by the IDB on a daily basis to reduce the spread and damage from invasive non-native species.

It is intended that the Board's staff and contractors will follow procedures commensurate with this Policy.

POLICY STATEMENT

Invasive non-native species are wide spread nationally and if left uncontrolled present a threat to our aquatic and riparian systems. It is imperative that our field operations to manage flood risk and water levels do not exacerbate the risks to the environment and economy that are posed by these species. Failure to minimise the spread of invasive non-native species, where these are known to be present, can risk prosecution under the Wildlife & Countryside Act 1981.

Vigilance is required if we are to stop the spread of invasive non-native species, and it is imperative that we integrate basic biosecurity in our operations to prevent this spread. Much to do with biosecurity involves awareness, common sense and agreed procedures.

RESPONSIBILITIES

The Board is responsible for reviewing and approving the content and implementation of this Policy.

The Board will ensure any new contracts let will include reference to the Policy where a risk is considered to exist arising from the works involved.

All Board Members, staff and contractors are required to comply with the Policy's requirements and share responsibility for performance in implementing the Policy in regard to the health, safety and welfare of the environment.

IMPLEMENTATION

This Policy is implemented through supporting guidance documentation covering biosecurity procedures.

Where biosecurity risks have been identified operational Staff will be provided with training and information on identification of INNS likely to be found within the Drainage District.

All operational machinery, tools and personal protection equipment (PPE) identified as at risk of cross-contamination will be subject to 'check, clean, dry' decontamination procedures before moving between operations on watercourses and sites.

All Operational Staff will report sightings of INNS to (either the Board's Environment Officer or the GB NNS Secretariat directly)

APPROVAL

This Policy will be approved by the Board on 16 August 2018. This Policy will be reviewed, at a minimum, every five years.

Norfolk Rivers Internal Drainage Board

Biosecurity Procedures

PURPOSE

These procedures aim to help Board members, staff, and operators working for the IDB to identify key biosecurity risks pertinent to the internal drainage district and the Board's activities, and identify measures to address these risks.

OBJECTIVES

Unless you know and have inspected a site it is best to assume that it may have invasive non-native species and diseases that can be spread by contaminated clothes and equipment, so biosecurity is an important issues that should be planned for. Operators should take care to avoid transporting water and material between water bodies where a risk has been identified, hence it is essential that the IDB takes appropriate actions.

Operators visiting a site where an invasive non-native species is known to be present, should take measures to ensure they do not spread it. Failure to do so can risk prosecution under the Wildlife & Countryside Act 1981.

While most operators will be vigilant about the risk of spreading invasive non-native species and diseases, there is a real risk that those that are not could accidentally spread these organisms, harming the environment and potentially damaging the reputation of the Board, compromising its ability to operate, or work with partners.

RESPONSIBILITIES

Awareness

The Operations Manager and contractors will have oversight of biosecurity, disseminate information, and report on these matters.

The Board's staff will be encouraged to seek information on invasive non-native species and biosecurity practices. The Environment Agency and Non-native Species Secretariat have relevant useful information.

If a risk is identified then the operator concerned or contractor should be made aware of the priority invasive non-native species, with specific attention to aquatic and riparian species of concern and those known to be present in the surrounding area. Training for staff and operatives as shall be provided as appropriate, and information will be disseminated through toolbox talks, workshops, leaflets, emails etc. Contractors should be asked to confirm that they have similar arrangements in place.

Signage, species alerts/information sheets, or guidance should be in place, making operators aware of the risks, and providing advice on how to prevent spread.

Monitoring

Operators should be vigilant in the field for invasive non-native species and have an appropriate mechanism for recording and reporting sightings of suspected species, location, and relevant details.

New sightings should be reported to the Operations Manager and Environment Officer, and other authorities and/or land managers as appropriate. The PlantTracker app (www.planttracker.org.uk/), available free for Apple and Android devices, shows you how to identify invasive non-native plant species and enables you to easily submit geo-located photos whenever you find one.

Planning works

Biosecurity should be taken into consideration alongside other factors, such as health and safety, when planning operations and standard working procedures.

The risk of spreading invasive non-native species can be reduced by reducing the contact time in which equipment is exposed to the water. This is particularly important for items such as trailers, which have cavities that may retain water and be hard to inspect.

Propagules are small bits of plant that become detached and give rise to a new plant. Working practices that either reduce, or contain and remove, propagules should be encouraged where practicable, especially in regards to mechanical vegetation control.

Cleaning

Remember: Check, Clean, Dry - www.nonnativespecies.org/checkcleandry/

Decontamination is an essential process to be carried out prior to leaving a site where invasive species are present. This ensures that any foreign matter remains on the land/watercourse of origin, rather than taking it to another location.

Where it is not possible to conduct the decontamination prior to leaving the land/watercourse where the work was conducted (e.g. steam cleaning larger equipment), the operation should be carried out immediately afterwards at the depot or another secure site before the next operation.

Where a cross contamination risk has been identified any field team moving from a contaminated site should carry a 'disinfection box'. This should contain an appropriate commercial disinfectant, a spray bottle, cloths or sponges, a scrubbing brush and protective gloves.

On completion of a field operation, for situations where cross contamination is identified as a risk, the following principles apply:

1. Visually inspect all tools, equipment and machinery that has come into contact with the water for evidence of attached plant or animal material, or adherent mud or debris.
2. Remove any attached or adherent material before leaving the site of operation.
3. Washing/hosing with water will be sufficient to remove debris from most tools, equipment and machinery. Use hot water where possible.
4. Ensure that all water is drained from any water retaining compartments, outboard motors, tanks and other equipment before transportation elsewhere.
5. A high pressure washer preferably steam cleaner will be essential for more difficult stains or soil, paying particular attention to the tyres, tracks and undercarriage of vehicles and buckets, hulls, outboard motors and submerged parts of machinery. High-pressure steam cleaning, with water >40°C, is recommended for larger equipment, excavators, boats, trailers, and outboard motors that are being moved from one watercourse to another.
6. Clothing and PPE should be visually inspected and any attached vegetation or debris removed. Soiled clothing and PPE should be removed for laundering and boots scrubbed clean; hands and other body parts may also need cleaning.
7. Finally, decontamination by spraying on a commercial disinfectant such as Virkon at the recommended strength to the cleaned boots, tools, equipment or machinery will ensure any remaining disease agents or pests are destroyed.

Every effort should be made to ensure that the decontamination process is a public exercise and where appropriate tactfully brought to the attention of the land owner or manager at the appropriate time. It is not just a question of doing the right thing but also being seen to be doing it. In this way, public confidence will be maintained in flood and water level management operations.

APPROVAL

These procedures were adopted on 16 August 2018.

From: 01 April 2018
 To: 30 June 2018

Period To: 3
 Year Ended: 31 March 2019

NOTES	INCOME AND EXPENDITURE ACCOUNT	Y-T-D BUDGET £	Y-T-D ACTUAL £	Y-T-D VARIANCE £	ANNUAL BUDGET £	PROJECTED OUT-TURN £	PROJECTED VARIANCE £
<u>Income</u>							
	Occupiers Drainage Rates	78,978	78,978	0	78,978	78,978	0
1	Special Levies issued by the Board	305,690	305,690	0	305,690	305,690	0
2	Highland Water Contributions from EA	128,743	98,945	-29,798	128,743	98,945	-29,798
	Grants Applied	195,631	49,519	-146,112	782,525	636,413	-146,112
3	Income from Rechargeable Works	2,789	55,871	53,082	11,157	55,871	44,714
	Investment Interest	0	637	637	0	2,549	2,549
	Development Contributions	0	29,935	29,935	0	29,935	29,935
5	Other Income	35,733	45,222	9,489	142,930	152,420	9,490
Total Income		£747,564	£664,797	-£82,767	£1,450,023	£1,360,801	-£89,222
<u>Less Expenditure</u>							
6	Capital Works	196,131	49,663	146,468	784,525	638,057	146,468
7	Precept Contributions to EA	64,094	70,501	-6,407	64,094	70,501	-6,407
8	Maintenance Works	143,085	106,319	36,767	459,049	450,605	8,444
	Development Expenditure	0	4,490	-4,490	0	4,490	-4,490
9	Administration Charges	34,135	42,741	-8,606	136,540	145,146	-8,606
3	Cost of Rechargeable Works	0	43,473	-43,473	0	43,473	-43,473
4	Net Deficit/(Surplus) on Operating Accounts	0	-13,457	13,457	0	0	0
Total Expenditure		£437,445	£303,730	£133,716	£1,444,208	£1,352,272	£91,936
	Profit/(Loss) on disposal of Fixed Assets	£0	£0	£0	£0	£0	£0
Net Surplus/(Deficit)		£310,119	£361,067	£50,948	£5,815	£8,529	£2,714

From: 01 April 2018
To: 30 June 2018

Period To: 3
Year Ended: 31 March 2019

NOTES	BALANCE SHEET AS AT 30-6-2018	OPENING BALANCE £	MOVEMENT THIS YEAR £	CLOSING BALANCE £
10	Fixed Assets			
	Land and Buildings	39,960	-250	39,710
	Plant and Equipment	23,388	-1,725	21,663
	Shared Consortium Assets	0	0	0
		63,348	-1,975	61,373
	Current Assets			
11	Bank Account	240,663	-157,229	83,434
12	Trade Debtors	102,677	73,327	176,004
13	Work in Progress	0	7,115	7,115
14	Term Deposits	700,000	200,000	900,000
15,16	Drainage Ratepayers and Special Levies Due	2,190	163,981	166,171
	Prepayments	0	0	0
17	Prepayments to WMA	-21,921	44,308	22,387
	VAT Due	0	5,737	5,737
	Grants Due	0	0	0
		1,023,609	337,240	1,360,849
	Less Current Liabilities			
	Trade Creditors	10,502	24,787	35,289
	Accruals	8,570	0	8,570
	Drainage Rates/Special Levies paid in advance	1,070	-1,070	0
	Finance Leases	0	0	0
	Payroll Controls	0	0	0
		20,142	23,717	43,859
	Net Current Assets	1,003,467	313,522	1,316,989
	Less Long Term Liabilities			
19	Pension Liability	125,000	0	125,000
	Net Assets	£941,815	£311,548	£1,253,363
20	Reserves			
	Earmarked			
	General Reserve	554,974	361,066	916,040
18	Grants Reserve	224,313	-49,518	174,795
21	Development Reserve	181,569	0	181,569
22	Plant Reserve	65,000	0	65,000
		1,025,856	311,548	1,337,404
	Non-Distributable			
23	Revaluation Reserve	40,959	0	40,959
19	Pension Reserve	-125,000	0	-125,000
		-84,041	0	-84,041
	Total Reserves	£941,815	£311,548	£1,253,363

P J CAMAMILE MA FCIS
CHIEF EXECUTIVE

S JEFFREY BSc (Hons) FCCA
FINANCE OFFICER

From: 01 April 2018
To: 30 June 2018

Period To: 3
Year Ended: 31 March 2019

Note Notes to the Accounts

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

	Y-T-D BUDGET	Y-T-D 2018/19
Breckland District Council	48,945	48,945
Broadland District Council	73,086	73,086
King's Lynn and West Norfolk Borough Council	18,590	18,590
North Norfolk District Council	97,531	97,531
Norwich City Council	5,457	5,457
South Norfolk District Council	62,081	62,081
	305,690	305,690

- 2 The EA Highland Water Claim for 2018/19 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 2018/19
Labour Operations Account	0	-12,776
Mobile Plant Operations Account	0	-681
	0	-13,457

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 2018/19
Shared Income from WMA	34,358	45,222
Insurance Claims	0	0
Sundry Income	1,250	0
Summons Costs	125	0
	35,733	45,222

- 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 2018/19 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 2018/19
Labour Charges	31,296	16,921
Plant Charges	2,053	1,110
Materials	0	0
Contractors	35,561	19,226
Plant Hire & Transport	0	0
Direct Works	68,910	37,257
Technical Support Staff Costs	70,716	68,658
Other Technical Support Costs	500	404
Biodiversity Action Plan Costs	2,959	0
Maintenance Works	143,085	106,319

- 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:

From: 01 April 2018
To: 30 June 2018

Period To: 3
Year Ended: 31 March 2019

Note Notes to the Accounts

	Y-T-D BUDGET	Y-T-D 2018/19
Administration Staff Costs	23,855	25,175
Other Administration Costs	9,906	17,027
Drainage Rates AV Increases/(Decreases)	125	0
Depreciation Kettlewell House	250	250
Sundry Debtors written off	0	0
Sundry Expenses	0	0
Settlement Discount	0	289
	34,135	42,741

10 TANGIBLE FIXED ASSETS

Cost	Land and Buildings	Plant and Equipment	Total
Opening Balance as at 1-4-2018 b/fwd	49,950	90,644	140,594
(+) Additions	0	0	0
(-) Disposals	0	0	0
(=) Closing Balance as at 30-6-2018 c/fwd	49,950	90,644	140,594
Depreciation			
Opening Balance as at 1-4-2018 b/fwd	9,990	67,256	77,246
(+) Depreciation Charge for year	250	1,725	1,975
(-) Accumulated Depreciation written out on disposal	0	0	0
(=) Closing Balance as at 30-6-2018 c/fwd	10,240	68,980	79,220
Net Book Value as at 31-3-2018	39,960	23,388	63,348
Net Book Value as at 30-6-2018	39,710	21,663	61,373

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:

	2017/18	2018/19
Opening Balance as at 1-4 b/fwd	143,703	240,663
(+) Receipts	1,325,008	408,456
(-) Payments	-1,228,049	-565,685
(=) Closing Balance as at 30-6-2018 c/fwd	240,663	83,434
Balance on Statement as at 30-6-2018	271,468	145,579
Less: Unpresented payments	-30,805	-62,144
Add: Unpresented receipts	0	0
Closing Balance as at 30-6-2018 c/fwd	240,663	83,434

- 12 Aged Debtor profile is currently as follows:

Debt period	Amount	Number of Debtors
<=30 days	159,133	4
>30 days and <=60 days	0	0
>60 days and <=90 days	0	0
>90 days	16,872	2
	176,004	6
>90 days	Amount	Inv. Date
EA0001	26,471	14/06/2016
	26,471	Originator
		Highland Water

From: 01 April 2018
To: 30 June 2018

Period To: 3
Year Ended: 31 March 2019

Note Notes to the Accounts

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

Customer	Amount	Comp. Date	Originator
RIMNR01	7,115	Ongoing	Operations Engineer
	<u>7,115</u>		

- 14 Term Deposits are currently as follows:

Financial Institution	Capital	Investment Date	Maturity Date	Variable Interest Rate
Natwest Treasury Reserve Deposit	400,000	26/10/2017	26/10/2018	0.56%
West Bromwich Building Society	500,000	29/06/2018	28/09/2018	0.56%
	<u>900,000</u>			

- 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 213 Ratepayers that have not paid their Drainage Rates for 2018/19, as compared to 222 Ratepayers this time last year. Summarised transactions for Drainage Rates and Special Levies during the year are as follows:

	2017/18	2018/19
Arrears b/fwd	2,048	2,190
Drainage Rates for the year	76,680	78,978
Special Levies for the year	296,774	305,690
New Assessments	576	31
Value Increases (Decreases)	-576	-31
Payments Received	-374,273	-220,397
Settlement Discount	-241	-289
Returned/(Represented) amounts	0	0
Irrecoverables and write offs	-993	-1
Summons collection costs	2,175	0
Adjustments	19	0
Arrears c/fwd	<u>2,190</u>	<u>166,171</u>

- 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**

Grants Unapplied are those grants that we have received in advance of doing work on the following schemes:

	2017/18	2018/19
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
SCH04 River Nar East Lexham Lakes Bypass	0	0
SCH12 River Wensum Resoration Scheme	57,578	52,703
SCH13 River Nar Restoration Scheme 4 Year	157,249	112,605
SCH15 Strategic Modelling and Restoration Project	0	0
SCH25 WFD Maintenance Improvements PSCA	3,701	3,701
	<u>224,313</u>	<u>174,795</u>

- 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 2018.

- 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 £1,908,000 as at 31 March 2018 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 26 January 2017.

- 20 The Reserves are managed in accordance with the Capital Financing and Reserves Policy, as approved by the Board on 21

From: 01 April 2018
To: 30 June 2018

Period To: 3
Year Ended: 31 March 2019

Note Notes to the Accounts

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 D Papworth is the Chairman of the Norfolk Rivers IDB. He has been paid £0 Chairman's Allowance during the year.
- 25 The Board has paid B J Goose a sum of £0.00 for plant/labour hire upto 30/06/18. The Board's Operations Manager is related to Ben Goose.
- 26 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 30-6-2018.

P J CAMAMILE MA FCIS
CHIEF EXECUTIVE

S JEFFREY BSc (Hons) FCCA
FINANCE OFFICER

NORFOLK RIVERS IDB

SCHEDULE OF PAID ACCOUNTS

Payment Date from: 01/04/2018

Payment Date to: 30/06/2018

<u>NAME</u>	<u>DETAILS</u>	<u>% COST RECOVERABLE</u>	<u>AMOUNT PAID THIS PERIOD</u>
Acle Garden Machinery	Harness	0	45.00
ADC (East Anglia) Ltd	Dewatering & CCTV	0	7,392.00
Anglia Farmers	Rechargeable Works	100	1,614.48
Aveland Trees Ltd	Trees	100	76.38
Broads (2006) IDB	Recharge Work	100	3,724.00
Clackmannan Settlement	Chestnut Posts	100	1,080.00
S J Cobbold	Drain Clearance	0	3,372.00
Ernest Doe & Sons Ltd	Tools/Supplies	0	22.74
Environment Agency	Precept	0	35,250.50
Five Rivers Environmental	Post Restoration Monitoring	100	11,666.88
GDR Sales Ltd	Plant/Labour Hire	76	56,806.09
HMRC	VAT	0	4,324.90
Inland Revenue	PAYE	0	3,086.52
JKH Drainage Units Ltd	Water Control Structure	100	1,536.00
Norfolk Pension Fund	Superannuation	0	3,384.29
NTD Hire	Tracked Dumper Hire	100	11,640.00
Salix	Rock Rolls/Mattresses	100	3,090.38
Survey Solutions	Topographical Survey	100	5,100.00
WMA	Staff Recharges/Materials	80	25,297.47

Please note that the amounts shown above include VAT **£178,509.63**

**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)	(1) Reduction in, or insufficient finance, grant and income	Erosion of Board's capital and general reserves	3	3	9 →	Explore alternative funding streams
	(2) EA may cease to pay highland water contributions to IDBs	Reduction in FCERM service the Board is able to provide Unable to replace assets as scheduled in asset management plan				
	(3) 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	6 →	Develop Investment Plan with key stakeholders
	(4) EA is no longer willing or	Will limit the Board's ability to fulfil its statutory	2	3	6 →	PSCA in place between IDB/EA, effective 2017/18 to undertake

**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)
	able to carry out work on Main Rivers	function				<p>maintenance works on some sections of main river identified by the IDB's Project Engineer that will provide benefit to IDB watercourses.</p> <p>Continue to encourage the EA to remain lengths of less strategically important main river for the IDB to adopt and maintain</p>
	(5) 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 ↓	<p>Work with EA, NE and voluntary sector orgs to meet WFD requirements.</p> <p>Agree interpretation of Habitat Regulations Assessments with NE.</p> <p>SMO regularly updated to remain WFD compliant</p> <p>Regular SMO update training for employees</p> <p>Pursue funding from all available sources</p>
To enable and facilitate land use for residential, commercial, recreational and environmental purposes by guiding and regulating activities,	(6) Planning Authorities ignore advice provided by Board,	Potential for increased flood risk	2	3	High 6 →	<p>Get involved with each constituent Planning Authority to better integrate/ coordinate planning and flood risk management issues</p>

**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)
which have the potential to increase flood risk	<p>which leads to increased flood risk</p> <p>(7) Lack of staff resources results in turning a blind eye to Byelaw/Land Drainage Act infringements and contraventions or failure to collect development contributions and commuted sums</p> <p>(8) 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</p>	<p>Lost income from SWDCs and commuted sums</p> <p>Inadequate or total lack of maintenance of SUDs could have an adverse impact on the IDB infrastructure and subsequently increase the risk of flooding</p>				<p>Board comments made on planning applications are available on each Planning Authority's website</p> <p>Planning/Enforcement issues reported at Board and Committee meetings</p> <p>Lobby LPAs to include IDBs as Statutory Consultees and to treat IDB watercourses as SUDs</p> <p>Promote IDB services for adoption of SUDs in planning consents to ensure they are maintained in perpetuity</p> <p>The Board approved a SUDs adoption and charging policy at its meeting on 26 January 2017</p> <p>Liaise with Local Authorities about the introduction of IDB Byelaws outside the IDD</p> <p>Increased resource following appointment of WMA Flood and Water</p>

**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)
						Manager in November 2017 and dedicated WMA Eastern Flood and Water Officer in December 2017.

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.

Distributed to:

Members

Bambridge S G
Bannock C H Mrs
Birkbeck H C
Borrett W
Borthwick J
Bracey J
Broome P
Carrick J F (Vice-Chairman)
Cator H G
Carrick P H
Everett G
FitzPatrick V
Foster N W D
Foulger C
Labouchere J P
Legg N
Little M R
Monument L Mrs
Moore P
Mutimer G T
Oldfield J F
Oliver J Mrs
Papworth P D (Chairman)
Reynolds R
Sayer M J
Shaw S
Stevens R
Watson E Mrs
Wilbourn R

Officers

Bloomfield G
Brown G
Camamile P J
George P
Jeffrey Miss S
Laburn Ms C
Mandley Miss H
Philpot M