



## **Broads Forum**

### **AGENDA**

**28 July 2016**

**2.00pm**

	Page
1. <b>To receive apologies for absence</b>	
2. <b>Appointment of Chairman and Vice-Chairman</b>	
3. <b>Chairman's announcements:</b> (i) Report back from Broads Authority meeting on 18 March, 13 May and 8 July. (ii) Public recording in meetings (iii) Any other announcements	
4. <b>To receive and confirm the minutes of the meeting held on 4 February 2016 (herewith)</b>	1 – 8
5. <b>Public Question Time</b> To note whether any questions have been raised by members of the public	
6. <b>Summary of Progress/Actions/Response Taken following Discussions at Previous Meetings</b> Report by Administrative Officer (herewith)	9
7. <b>Water Recycling in the Broads</b> Presentation by Claire Piper and Maria Woods, Anglian Water	10 – 34
8. <b>The Public Staithes of the Broads: A History and Assessment</b> Presentation by Prof Tom Williamson, University of East Anglia	
9. <b>Lake Restoration Action Plan 2016/17 – 2021/22</b> Report by Senior Ecologist and Director of Operations (herewith)	35 – 44
10. <b>Mooring Strategy Update</b> Report by Senior Waterways and Recreation Officer (herewith)	45 – 52

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11. <b>Wet Grassland Project</b> Report by Senior Ecologist (herewith)	53 – 56
12. <b>Chief Executive’s Report</b> Report (herewith) – For information only	57 – 61
13. <b>Parish Issues</b> Standing item for local community members to report	
14. <b>Current Issues</b>	
15. <b>To note whether any items have been proposed as items of urgent business</b>	
16. <b>Matters for Chairman to raise at next Broads Authority meeting</b>	
17. <b>Matters to be discussed at the next meeting</b>	
18. <b>To note the date of the next meeting – Thursday 3 November 2016 at 2.00pm at Yare House, 62-64 Thorpe Road, Norwich</b>	

## **Broads Forum**

Minutes of the meeting held on 4 February 2016

### **Present:**

Dr Keith Bacon in the Chair

Mr Julian Barnwell	Mr Brian Holt	Mr Richard Starling (2/1-2/10)
Mr Ashley Cato	Mr Peter Jermy	Mr Charles Swan
Mr Michael Flett	Mr John Lurkins	Mr Hugh Taylor
Mr Tony Gibbons	Ms Jennifer Parkhouse	Mr John Tibbenham
Ms Barbara Greasley	Mr Philip Pearson	Mr Peter Waters
Mr Robin Godber	Mr Simon Partridge	Mr Anthony Wright
Mr John Hiskett	Mr Bryan Read	

### **In Attendance:**

Ms Natalie Beal – Planning Policy Officer  
Ms Maria Conti – Strategy and Projects Officer  
Mr Gavin Devaney – Environment Officer  
Ms Esmeralda Guds – Administrative Officer  
Mr Bruce Hanson – Tourism and Promotion Officer  
Dr Dan Hoare – Environment and Design Supervisor  
Mr Simon Hooton – Head of Strategy and Projects  
Ms Angie Leeper – Asset Officer  
Ms Andrea Long – Director of Planning and Resources  
Dr John Packman – Chief Executive  
Ms Trudi Wakelin – Director of Operations

### **Also in attendance:**

Rory Sanderson – Environment Agency  
Prof. Jackie Burgess – Chair, Broads Authority

### **2/1 Apologies and Welcome**

Apologies for absence were received from Andrew Alston, Brian Barker, Henry Cator, Martyn Davey, Matthew Thwaites and Martin George

The Chair welcomed Prof. Jackie Burgess, Chair of the Broads Authority, Nick Deane, the substitute for Andrew Alston and Colin Dye, the substitute for Matthew Thwaites, to the meeting. Tribute was paid to Martin George who had resigned from the Forum and Paul Savage was welcomed to the Forum as his replacement.

### **2/2 Chairman's Announcements**

The Chairman reported on the Broads Authority meetings of 20 March 2015 and the issues discussed including:

- (1) Climate Change
- (2) Fen Habitat
- (3) Strategic Priorities for 2016/17 – which are the same 5 as in 2015/16
- (4) National Park Partnership
- (5) Report Asset Management Plan
- (6) Tolls Review Group and Navigation Charges
- (7) Public Question – although it was not ideal it was an efficient system and therefore would continue for the time being

**2/3 To receive and confirm the minutes of the meeting held on 5 November 2015**

The minutes of the meeting held on 5 November 2015 were confirmed as a correct record and signed by the Chairman subject to the following amendment:

- *Minute 1/9 Parish Issues. Para 2: boats moored at Loddon should read boats moored at Ludham.*

**2/4 Public Question Time**

No questions were raised by members of the public.

**2/5 Summary of Progress/Actions/Response taken following discussions at previous meetings**

A report summarising the progress of current issues was received.

Members were updated that in regards to the future plans of the Ludham Bridge area there was no further progress to report.

As regards to the Harbour Revision Order it was clarified that this related to the area of water enclosed within Mutford Lock.

Members noted the report.

**2/6 2015 Broads Water Plant Survey Results**

Member received a report which presented and discussed the findings from the annual water plant survey carried out during 2015. A total of 28 broads were surveyed using a standard rake sampling technique. Waxham Cut, as a navigable channel was surveyed for water plants, using a similar methodology, but specifically developed for rivers and channels. Barton and Hickling broads were surveyed using hydro-acoustic survey equipment, to gain greater accuracy and resolution of the volume of water plants growing in the water, and their spatial extent over the bed of these broads. The report summarised the key findings of the annual water plant surveys completed in July to August 2015.

Richard Starling (RS) expressed concern in respect of a project from Natural England at Hoveton Great Broad involving bringing in seeds and plants from elsewhere. RS also commented on the description of the 2015 spring weather within the water plant report.

Members were informed that widespread growth of water plants was found outside the marked 'navigable channel' in Hickling Broad but that within the channel there was none. Some members asked about the potential of using the weed harvester to cut outside of the marked navigable channel.

RS and some other members expressed the importance that the survey was continued and comparable with previous results to show the relevant changes within Broads.

When Phil Pearson asked which other surveys were carried out in the Broads, the Environment and Design Supervisor responded that the wetland bird survey organised by the BTO and the Broads Authority water plant survey were closely linked. Together with the water quality information generated by the Environment Agency these were the three main surveys being carried out.

Members noted the report and welcomed the presentation and hoped the Authority would continue carrying out these surveys given the value of this nationally important long-term dataset.

## **2/7 Environment Agency Water Quality Data Accessibility**

Concerns have been raised that the water quality data collected by the Environment Agency (EA) was not provided in a single easily accessible and understandable format that provided basic information such as annual trends.

Members received a report and were given a presentation by Rory Sanderson from the Environment Agency which provided an explanation and demonstration of how water quality data can be accessed and gave an overview of the type and extent of data collected.

RS believed the website was too confusing and suggested that the Environment Agency and the Broads Authority work together on producing a more user friendly annual report stating the water quality in the Broads and whether it was improving. Rory Sanderson said he would take that idea back and see what might be possible, contacting RS to discuss any options.

John Hiskett (JH) enquired whether in case of a planning application the EA would provide water quality results of run off into the catchment to which Rory replied it would be the applicant's responsibility to provide that assessment, however he recognised the possibility for the EA to work with the appropriate bodies and advise them what to do.

Phil Pearson (PP) said that a higher target of water quality often needed to be met where there were international wildlife designations. It was currently unclear how this was impacting on Water Framework Directive priorities and whether the objectives were being met.

Members welcomed the report.

## **2/8 Review of Waste Facilities**

Members received a report which set out the current position in relation to waste facilities throughout the Broads Authority's area and it was confirmed that this would be updated in the Broadcaster and the Green Book.

As the classification of waste was still causing concern, it was emphasised that since the new regulations had been introduced many discussions had been held with the local authorities and that it was agreed that waste from both private and hire boats was categorised as commercial waste.

Members were informed that with the exception of Potter Heigham, evidence of major issues with waste was weak. The situation was not as bad as expected because the pattern of disposal by the public was changing and therefore the overall impact had been felt more by increased loads in the commercial waste facilities provided by the hire boat industry and the Broads Authority rather than by increased fly tipping. Therefore the Authority had decided that the most appropriate action was to monitor the situation for a year.

It was noted that other inland navigation authorities, such as the Canals and Rivers Trust, did not face the same issues, because it was the landowner.

Mike Flett expressed concern because waste disposal facilities would be withdrawn by the end of February not allowing Parish Councils enough time to make alternative arrangements.

Barbara Greasley's (BG) commented that it might be time for the Authority to offer a contribution to the costs of waste disposal facilities, from the navigation funds if necessary, however the Chief Executive believed that going down this route would risk all waste disposal facilities being withdrawn by the councils.

When the Chief Executive mentioned that the issue was being discussed by Norman Lamb and Elizabeth Truss, RS suggested that the Authority should take part in this discussion.

JT and PP expressed concerns that the issue of waste disposal and fly tipping would have a negative impact on the tourism industry, the environment and wild life and believed this should be considered and brought to the table.

Members noted the report.

## **2/9 Broads Local Plan: Issues and Options**

Members received a report which introduced the Broads Local Plan Issues and Options Stage. This was the first stage in the preparation of a draft Local Plan and highlighted the key topics which future planning policies could cover

and also outlined some options for the direction of that planning policy. Local Planning Authorities were required to undertake public consultation at specific stages of plan preparation and it was anticipated that the Issues and Options would be the subject of public consultation beginning in February 2016.

Members were informed that there would be drop-in sessions on 19 March in Oulton and on 23 March in Brundall.

A suggested new approach to particular issues, such as peat, tranquillity, safety by the water and car parking were noted and RS suggested that the waste disposal issue would be added to the list of Issues and Options.

Members noted the report.

## **2/10 Broads Plan Review First Consultation Draft Broads Plan 2017**

The Broads Plan is the key strategic management plan for the Broads. The current plan was adopted in May 2011 and its review was a Strategic Priority for 2015/16. It was anticipated that a revised plan would be adopted in March 2017.

Members received a report which introduced the first draft Broads Plan 2017 prior to its publication for wider public consultation. The draft plan was taken to the Broads Authority on 22 January, seeking permission to publish the plan for consultation. Forum members were asked to publicise the plan within their various interest groups and parishes and to encourage responses to be made to the consultation

Members noted that the draft Broads Plan 2017 set out proposed actions under 11 aspirational headings. Alongside the Broads Local Plan (Issues and Options), the draft plan would be subject to public consultation, including a number of drop-in sessions around the Broads.

A discussion followed about identifying local food supplies and supporting the growth of this to help tourism in National Parks i.e. branded Broadland beef. This was an emerging priority for Defra.

PP mentioned that it was important to get the correct wording in the section of the plan that relates to green infrastructure and housing growth beyond the Broads boundaries, especially as the Authority was under extreme pressure from the Government for growth however it was important that this was not at any cost.

When PP mentioned that the plan should include targets it was explained that these would be incorporated in the second draft of the plan once there was Broads agreement on the themes and projects that it needed to cover.

Members noted the report.

## **2/11 Draft Strategy and Action Plan for Sustainable Tourism in the Broads 2016 - 2020**

Members received a report which presented the first draft of a Strategy and Action Plan for Sustainable Tourism in the Broads, for the years 2016–2020, following the review of the strategy covering the previous five years.

Members noted that the Sustainable Tourism Strategy and Action Plan was not just a Broads Authority Strategy but a strategy for all who were involved with tourism. It was further noted that there might be a funding opportunity from the Government in regards to transport in the Broads.

Barbara Greasley (BG) believed that the Strategy should include a section which reviewed progress made in previous years. The Tourism and Promotion Officer responded that an annual Action Plan included in the Strategy would help with this process in future years.

In response to questions about how other areas supported tourism, it was explained that there was a mixed approach. Visit Norfolk for example was funded by core public authorities whilst Visit North Norfolk was primarily a membership organisation reflecting local businesses. Local Enterprise Partnership (LEP) funding was primarily for particular projects though tourism was not featuring so high on their list of priorities.

PP enquired whether there were any work plans on places tourists were visiting.

It was noted that the Authority recognised the potential of the Southern Broads and recognised the many opportunities it had to offer and members were assured that the Southern Broads would continue to be promoted. It was agreed that discussion would occur with Broads Tourism before distribution of the draft document to enable refinement of some of the elements especially with regard to implementation processes.

Members noted the report.

## **2/12 Chief Executive's Report**

The Chief Executive presented his report, which summarised the current position of the Authority's strategic priorities.

The Chief Executive mentioned that a report commissioned by the Broads Climate Partnership would explore current understanding related to the coast from Eccles to Great Yarmouth and its relationship with the future of the Broads Flood Alleviation Project. This would help with short term applications for maintaining defences on the coast and help relate action to future options for flood risk management including the option of flood barriers. The results would be brought back to the Forum at a later meeting.

Members said they welcomed the emails from the Chief Executive updating them on the latest affairs.

It was noted that the National Park Grant was guaranteed for the next four years which essentially meant it would allow the Authority to improve its future planning. It was stressed however this did not mean the Authority would have access to extra funds so therefore would need to continue to watch its expenditure.

It was further noted that the Broads Authority was approached by the Norfolk Show. They were offered a good deal to have a presence in a new Broads Area on the showground. The Authority recognised this was most likely to be a one off offer, and so believed this would be the perfect opportunity to promote the Broads National Park and perhaps display a launch and the Fen Harvester.

The Chief Executive informed members that it had become apparent that supporting a single National Park was not of any interest to the largest companies. A new National Park Partnership has therefore been established to engage with big corporations to support the efforts of all 15 National Parks in the UK.

Members were updated on the Thorpe Island issue and the Chief Executive informed members that he had met with the landowner earlier in the day who had agreed to confirm his intentions with regard to the Enforcement Notice and the actions being considered for injunctions by the end of the week.

Members were further informed that Elizabeth Truss had given a speech about the budget in which the National Parks and the Broads had been highlighted as special landscapes and that Defra would put a 25 year plan together about the environment.

Nick Deane stated that Elizabeth Truss had mentioned the localism issue and enquired how this would affect the decision making process and where the control would come from. The Chief Executive responded that both Rory Stewart and Elizabeth Truss regarded the catchment approach as being central to a new way of working and so the partnership work in places like the Upper Thurne was likely to grow in importance.

PP enquired whether there were any more negotiations about the trial zone of waterskiing on Breydon Water to which the Chief Executive responded that any further information would be forwarded to him and Julian Barnwell (JB).

Members noted the report.

## **2/13 Parish Issues**

In relation to the closure of the Wherryman's Way between Chedgrave and Hardley, JL enquired whether the mats could be removed and suggested a meeting involving BA, BESL and the EA about re-opening the footpath. The Senior Waterways and Recreation Officer replied that he was already due to have a meeting with the EA and Norfolk County Council concerning this

matter on the following Wednesday. He explained the issue was that Norfolk County Council wanted to cover the mats with soil instead of removing them in order to raise the bank, however this would need consent. The Authority wants to know whether it would be possible to simply replace the stakes instead.

On behalf of the Friends of the Earth, Jennifer Parkhouse (JP) enquired about Catfield Fen in relation to two water extraction licenses. PP and Keith Bacon said they would be in touch to brief her on the issue.

**2/14 Current Issues**

No items were proposed as current issues.

**2/15 Matters for Chairman to raise at next Broads Authority meeting**

The Chairman would report to the Broads Authority meeting on the various issues discussed by the Forum.

**2/16 Matters to be discussed at the next meeting**

It was noted that the Chair and Vice Chair would be elected at the next meeting and it was suggested to have an update on the Mooring Strategy.

**2/17 Date of Next Meeting**

To note that the date of the next meeting would be Thursday 28 April 2016 at 2.00pm at Yare House, 62-64 Thorpe Road, Norwich.

The meeting concluded at 4.45 pm.

Chairman

**Summary of Progress/Actions/Response Taken Following Discussions at Previous Meetings**  
Report by Administrative Officer

<b>Date of Meeting and Minute No</b>	<b>Discussion</b>	<b>Responsible Person</b>	<b>Summary of Progress</b>
6 November 2014 Minute 2/5 <b>Summary of Progress</b>	Outcome of future plans for the Ludham Bridge area which have been discussed with the Environment Agency	Asset Officer	Officers have had discussions and correspondence with the Environment Agency and position remains that we are still awaiting a reply from EA officers.
5 February 2015 Minute 3/10 <b>Parish Issues</b>	Any progress made with the Harbour Revision Order in regards to Mutford Lock.	Director of Operations	The tripartite agreement has been signed by all parties and are held pending completion of the HRO. Prior to starting the formal HRO process we need to submit a statement of intention. The HRO and statement of intention is currently with the MMO in draft form for their comments/directions. Supplementary documents - plans, photographs and supporting letters - have been submitted from ABP and SCC and will be forwarded to the MMO by 1 July. The intention is that the MMO will then give us their feedback and once we get the ok we can then formally submit the HRO.

**Broads Forum**  
28 July 2016  
Agenda Item No 7



# Broads Authority Forum

## Water Recycling in the Broads

### July 2016

Maria Woods and Claire Piper

LOVE EVERY DROP. PUT WATER AT THE HEART  
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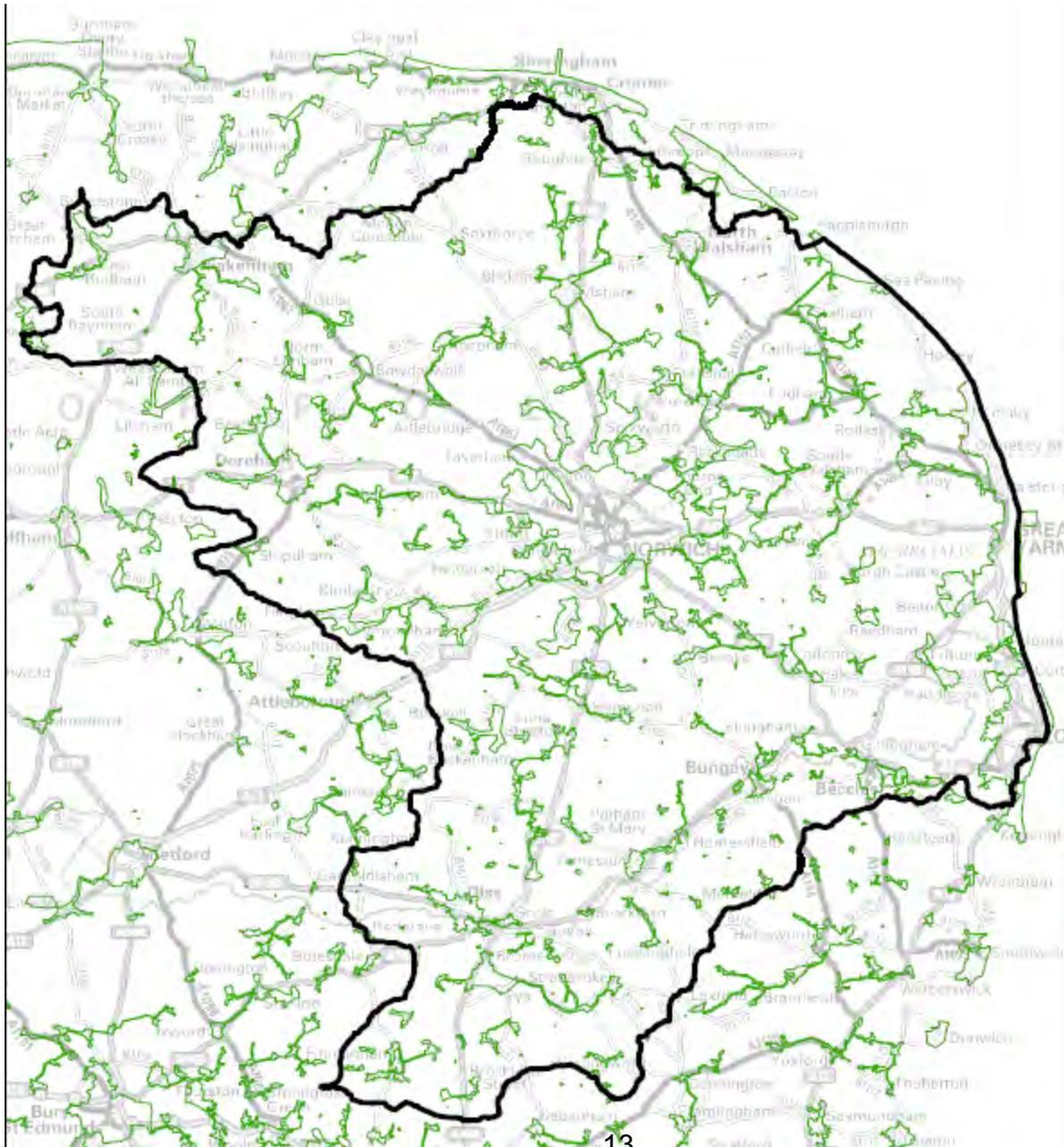
# Agenda

- Some questions for you..
- The Broads Area and Anglian Water
- Environmental Discharge Permits and Compliance
- The Business Context and future investment
- First time sewerage schemes
- Any questions?

Please say if you don't understand acronyms etc

# The Broads Area and Anglian Water

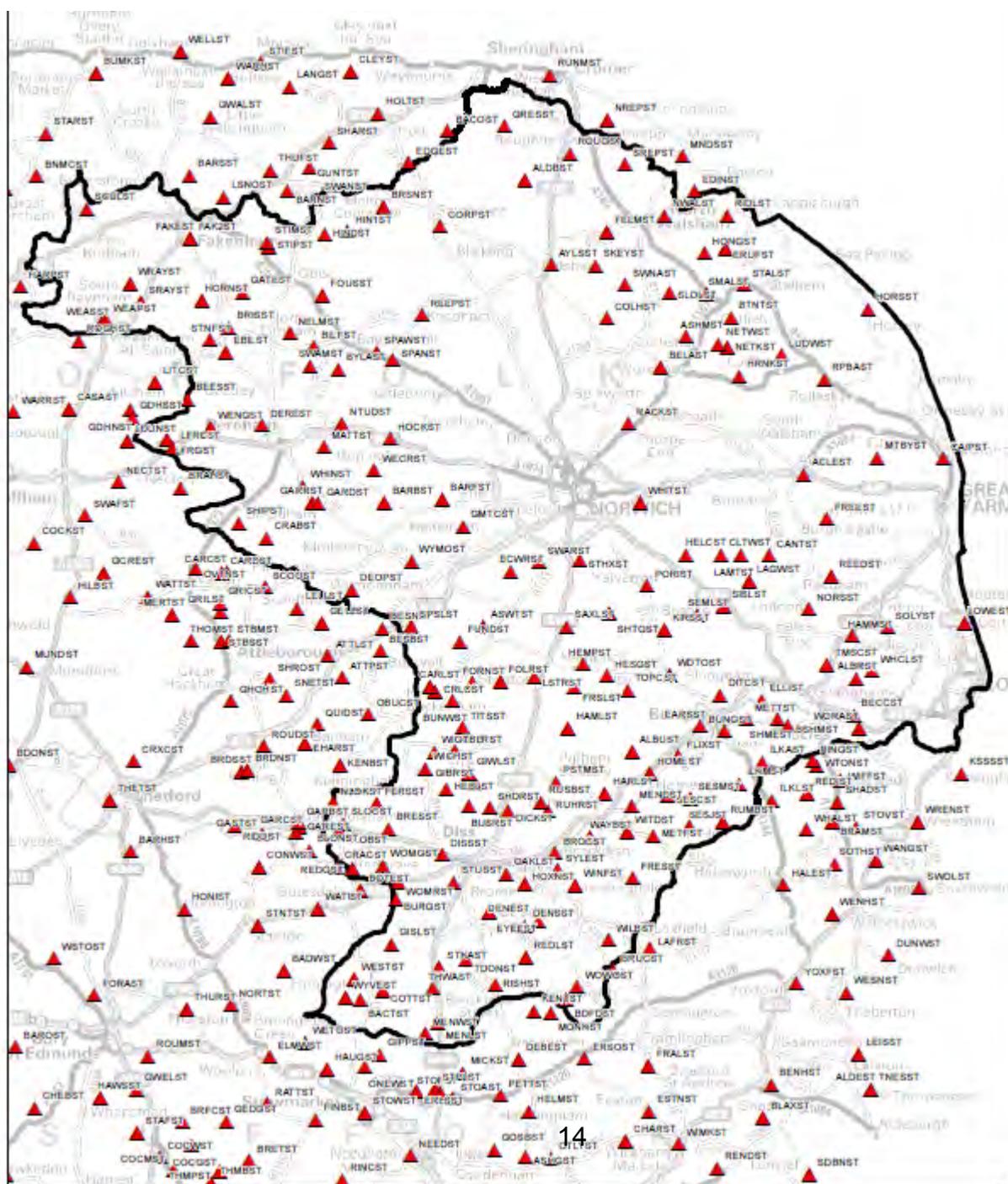
Maria Woods  
Environmental Permit Scientist



love  
every  
drop.



anglianwater



love every drop.  
anglianwater

# Environmental Discharge Permits and Compliance

Maria Woods  
Environmental Permit Scientist

# Environmental Discharge Permits



- We cannot make a legal discharge without one regardless of quality
- States what you can discharge, where and how much
- Standards are set to maintain and meet water quality standards resulting from directives
- Standards vary according to sensitivity of receiving water course, one of most important is available dilution / flow
- Has numeric conditions and lots of other conditions e.g. reporting & management condition
- The EA set water quality targets and regulate our compliance.

# Treatment Capacities and standards



- See information table in pack
- Most common standards are for TSS, BOD, Ammonia
- Descriptive limits
- Urban Waste Water Treatment Directive
- Also of great importance to the Broads is phosphorous
- Dry weather flow & full flow to treatment – broadly determines capacity of WRC
- Information includes receiving watercourse

# Treatment Capacities and standards



Example:

Asset Short Name	Asset Name	Receiving Watercourse	Main Watercourse	DWF mcd	FFT mcd	Solids mg/l	BOD mg/l	Ammonia mg/l	Descriptive consent	UWWTD limits?	P removal now or by end AMP6?
ACLEST	ACLE DAMGATE LANE STW NEW	R.BURE T		900	ALL	60	35A	14	No	Yes	
ALBUST	ALBURGH-CHURCH ROAD STW	R.WAVENEY NT		35					Yes		
ALDBST	ALDBOROUGH-THWAITE HILL FM STW	Scarrow Beck	River Bure	291	<755	80	40A	10	No		yes

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OF A WHOLE NEW WAY OF LIVING.

# Compliance with permits



- Descriptive permits (<250 population served)

EA WRC site visits

- Sites with numeric standards

Operator Self Monitoring - AWS samples WRCs and reports results and reports these to EA

EA audit our processes and procedures against conditions in permit (e.g. timely and accurate reporting of results)

Backed up by: EA WRC site visits

# Compliance with permits 2015



<b>WWTW numeric compliance combined total</b>	No of Failures % Compliance	<b>7</b> <b>99.0%</b>
Sanitary Numeric Limits all	No of Failures % Compliance	<b>2</b> <b>99.7%</b>
Nutrient numeric limits all	No of Failures % Compliance	<b>0</b> <b>100.0%</b>
Non Sanitary Numeric Limits all (mostly metals)	No of Failures % Compliance	<b>3</b> <b>97.9</b>
UWWTD Numeric Compliance all	No of Failures % Compliance	<b>3</b> <b>99.0%</b>
UWWTD Nutrients Numeric Limits all	No of Failures % Compliance	<b>0</b> <b>100.0%</b>
UV Dose Total	No of Failures % Compliance	<b>0</b> <b>100.0%</b>
<b>Descriptive permits</b>		
WWTW (Descriptive) Compliance with Descriptive Conditions	No of Failures % Compliance	<b>1</b> <b>99.8%</b>

- In 2016 (to end June 2016) Anglian Water have 1 non compliant works (Barton on Humber)

# What happens if we don't comply?



- Detection of breach of permit requirement/regulatory non-compliance is immediately reported.
- Appropriate action taken to minimise the impact on the environment and customers
- Cause of non-compliance is investigated with EA. Management system assessed if this is suspected as the route cause.
- Anglian Water can be prosecuted by the EA, imposing unlimited fines.
- Negative media and stakeholder attention

# Business Context and Future investments

Claire Piper  
Assistant Process Manger

# Business context – our stakeholders



Government



The champion for water and sewerage customers, England and Wales



Regulators



love every drop.  
anglianwater



Customers



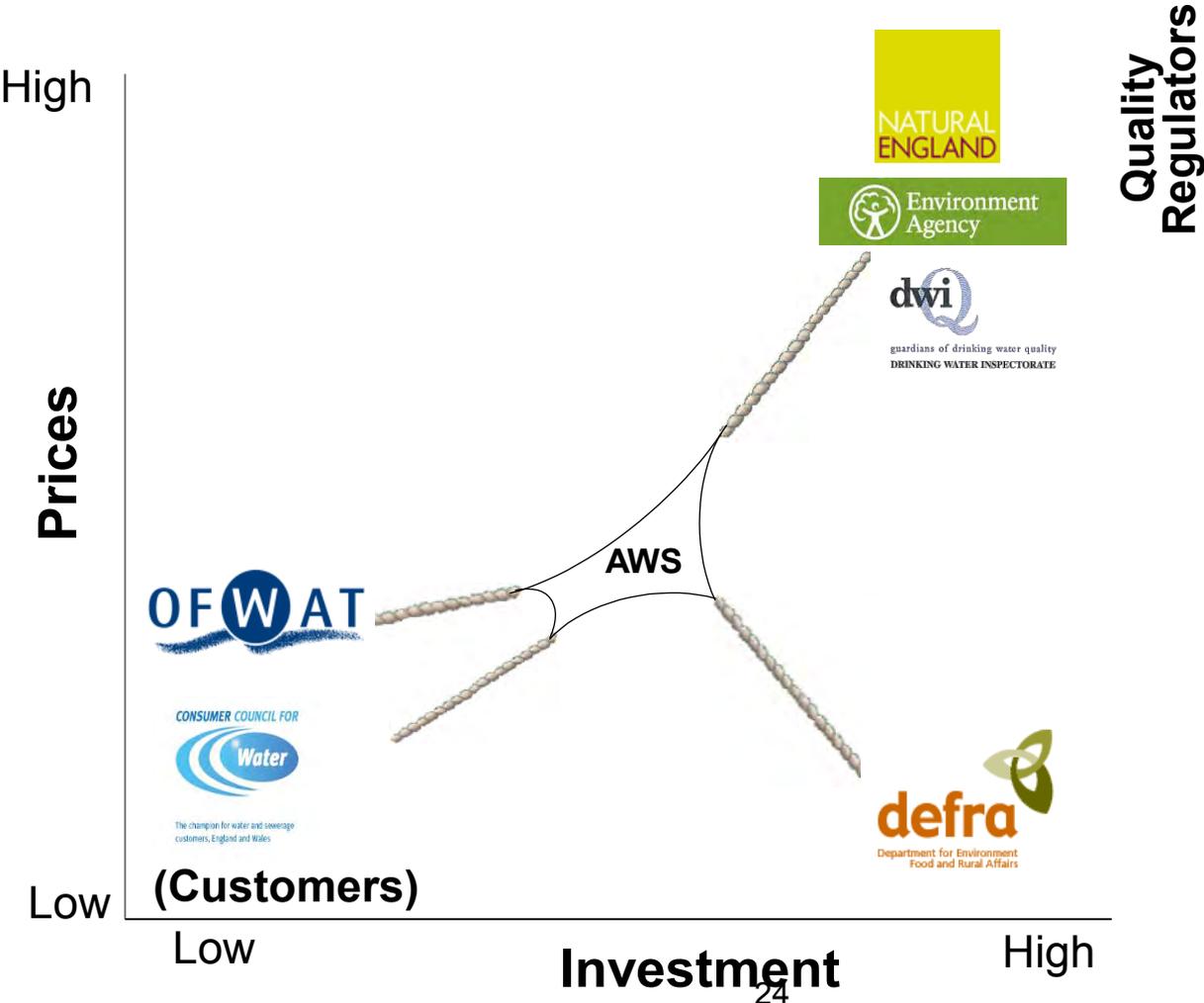
Owners (Osprey)



Employees



# Business context - Balancing stakeholders needs



# Our Business Planning process



- We provide customers with stability of bills by planning in 5yr cycles.
- Must predict supply demand, quality, security and maintenance requirements so that we make provisions for them in our business plan.



# Future Investment



Main drivers with respect to tighter environmental standards for discharges

- Quality - Directives / Regulations / EQS as discussed previously
- Growth – increase in Dry weather flows  
Standards tighten as we put more flow into the environment
- Combination of the two – WFD No Deterioration

Growth takes up dry weather flow capacity

See last 2 columns of table in information pack for details of AMP6 schemes

# Example schemes



- Wymondham (No det)
  - Current permit is TSS BOD 12mg/l, NH<sub>3</sub> of 4mg/l and P of 1mg/l.
  - Predicted (within permit) growth in the catchment means March 18 permit will be NH<sub>3</sub> of 1mg/l and P of 0.8mg/l.
- Ditchingham (GES NH<sub>3</sub>)
  - Current permit is TSS 35mg/l, BOD 20mg/l, P 1mg/l
  - To improve 15km of watercourse (Broome Beck and R. Waveney) new limits of 8.7mg/l NH<sub>3</sub> in March 18.
- Pulham St Mary (GES P)
  - Current permit is TSS 30mg/l BOD 15mg/l, NH<sub>3</sub> of 5mg/l
  - To improve 9.5km of watercourse (Starston Beck to R. Waveney) new limit of 2mg/l P in March 20

# First time sewerage schemes (s101a)

Claire Piper  
Assistant Process Manger

# First Time Sewerage Schemes (s101a)



- Anyone can apply to Anglian Water – as an individual or group
- Driver can be amenity or environmental impact
- AWS determine outcome based on Guidance Notes issued by Defra which includes environmental and amenity benefits and cost.
- If the application is refused it can be referred to the Environment Agency

Note: Section 98 of the Water Industry Act 1991 says any owner, occupier or local authority can demand the installation of a public sewer as long as they meet the cost of it

Connection costs – see handout in pack

# S101a Costs

love 

## OUR OFFER TO YOU

Sign up to our connection offer and we'll waive all charges we would normally make for new connections.

CONNECT TO THE NEW SEWER AS PART OF THE SCHEME AND YOU'LL GET...

✓ **FREE LATERAL DRAIN**

from the edge of your property boundary to the new sewer.

✓ **NO FEE**

on our usual one-off infrastructure charge.

Connect within 3 months and get

✓ **FIRST 12 MONTHS SEWERAGE CHARGES FOR FREE.\***

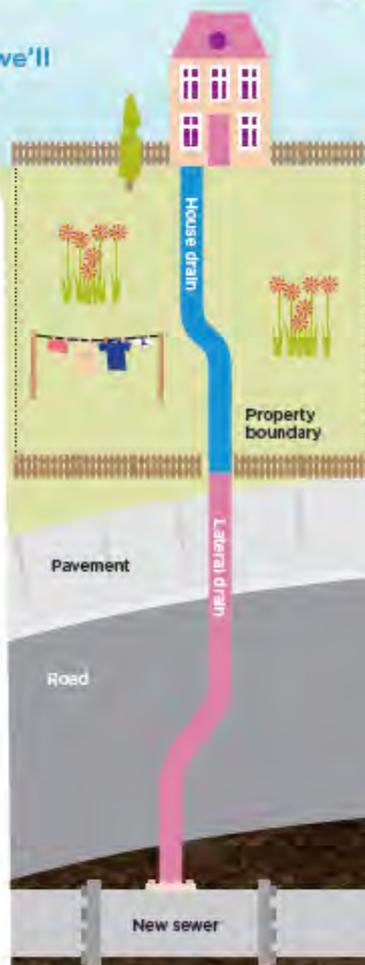
OR

Connect within 6 months and get

✓ **FIRST 6 MONTHS SEWERAGE CHARGES FOR FREE.**

\*This means you can get a maximum of one year's sewerage service for free just for connecting quickly once we have notified you that the sewer is available.

Note: Qualification of this extended period will be dependent on receipt of a Certificate of Completion - issued by the Building Control section of your local council.



### IF I TAKE UP THIS OFFER, WHAT WILL I PAY FOR?

You'll be responsible for paying and arranging the following:

- 1 The cost of separating your surface water from your foul water (if necessary).
- 2 The costs of laying your house drain from your property to the boundary of your land. For this work, you would normally employ a local builder.
- 3 Making an application to the building control section of your local council for a Building Control Inspection. They will normally charge a fee.

WHAT HAPPENS IF I DON'T TAKE UP THIS OFFER?

### CONNECTING YOUR PROPERTY TO THE NEW SEWER AFTER THE CONNECTION OFFER EXPIRES

If you apply for a sewer connection after the date given in the Invitation to Connect letter, we will incur additional costs for designing and retro fitting your lateral drain. So we won't be able to waive any charges and in addition to the costs of providing your own house drain to your boundary and the Building Control Inspection fee (as mentioned) you will also become responsible for:

- The one-off fixed infrastructure charge payment to Anglian Water.
- The cost of laying the public lateral drain, which is normally in the road, between the sewer and the boundary of your property. This can cost several thousand pounds.
- Sewerage service charges would start immediately upon your connection to the public sewer.

# S101a in the Broads area



- The EA are producing a map showing communities with no sewage provision – this has not yet been shared.
- S101a schemes AMP5:

<b>Scheme Name</b>	<b>Obligation date</b>	<b>Status</b>
East Ruston	Mar-15	Complete
Stratton Strawless	Mar-13	Complete
Neatishead	Mar-15	Complete

- S101a schemes AMP6:

<b>Output year</b>	<b>Scheme Name</b>	<b>Obligation date</b>	<b>Connectable properties</b>	<b>Status</b>
Year 3	Repps and Bastwick	31-Mar-20	65	Planned
Year 3	Worstead	31-Mar-20	14	Planned

# s101a



Q & A guide, connection offer and application form in pack

Also check out our website:

Q &A:

[http://www.anglianwater.co.uk/\\_assets/media/your\\_guide\\_to\\_first\\_time\\_sewage\\_v4\(1\).pdf](http://www.anglianwater.co.uk/_assets/media/your_guide_to_first_time_sewage_v4(1).pdf)

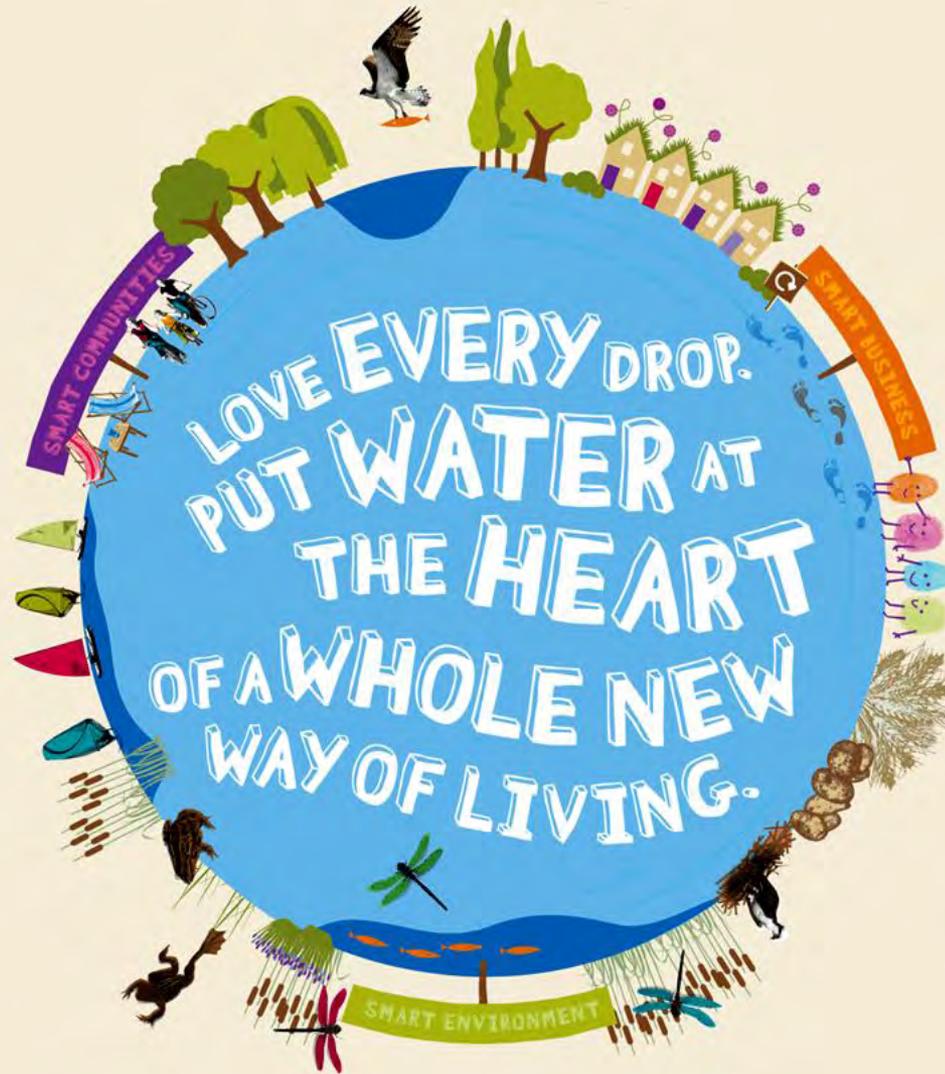
Application form:

[http://www.anglianwater.co.uk/\\_assets/media/s101a\\_application\\_form\\_v3.pdf](http://www.anglianwater.co.uk/_assets/media/s101a_application_form_v3.pdf)

# Thanks for listening

## Any questions?

LOVE EVERY DROP. PUT WATER AT THE HEART  
OF A WHOLE NEW WAY OF LIVING.



**Lake Restoration Action Plan 2016/17 – 2021/22**  
Report by Senior Ecologist and Director of Operations

**Summary:** A Lake Restoration Action Plan has been formed follow on from the scientific Lake Review (2015) and based on the prioritisation adopted Lake Restoration Strategy (2008). The Action Plan has been drawn up with key partners. Both large and small-scale lake restoration projects are ongoing and planned in the Broads. These combined efforts put the Broads as a national and international leader in lake restoration. This report also updates members on the progress made on the Hickling Broad Enhancement Project towards delivery of the Strategic priority.

## **1 Introduction**

- 1.1 The importance of healthy lake ecosystems for wildlife, economy, society is well evidenced through local (e.g. Broads Ecosystem Accounting, Lake Restoration Strategy), national (e.g. England Biodiversity Strategy) and international policy and guidance (e.g. Water Framework Directive).
- 1.2 At previous meetings the Broads Forum and Broads Authority have noted and endorsed the Guiding Strategies of the Lake Restoration Strategy (2008) and Biodiversity and Water Strategy (2013), which inform the Broads Plan.
- 1.3 There is a need for a new Action Plan for lake restoration from 2015/16 to 2021/22, to follow on from the scientific Lake Review (2015) and based on the prioritisation adopted Lake Restoration Strategy.

## **2 The Lake Restoration Action Plan**

- 2.1 The Action Plan draws on a diverse range of information sources that allowed waterbodies to be prioritised for restoration work, based on ecological and environmental data generated by the Broads Authority, Environment Agency, Natural England and a number of commercial partners.
- 2.2 The Broads Authority, Environment Agency, Natural England, Norfolk Wildlife Trust and Essex and Suffolk Water have been involved in drawing up this Action Plan. Partners have completed the following:
  - Agree actions/measures on a lake by lake basis. (Appendix - tabulated actions for each lake)
  - Prioritise actions/measures
  - Set plans for priority actions not currently being implemented

- 2.3 Partners agreed for the Broads Authority to update the Lake Restoration Strategy Action Plan and report via partner working groups (such as the Broads Biodiversity Group) and Broads Authority Committees (such as the Broads Forum). Some projects within the Action Plan have already been reported via separate Committee reports (Hickling and Hoveton Great Broad).
- 2.4 Members are invited to note the context for further investment in lake restoration and management along with the Action Plan for lake restoration and monitoring and comments are welcome. Members are also asked to express support for the continuing partnership work on the existing programme of work and work towards securing funding for further lake restoration projects, particularly where they benefit multiple objectives.

### **3 Hickling Broad enhancement project**

- 3.1 Members received a report in July 2015 which outlined the project proposal and sought the views of members in refining the project. Members welcomed the report and the overall expression was that they were in favour of the project. Subsequent meetings of the Navigation Committee and Broads Authority similarly supported the project and approved the further development and delivery of the first stage of the work.
- 3.2 Over the winter 15/16 bank protection works were undertaken at Hill Common in order to reduce active bank erosion, and trialled the use of Nicospan for such works. Urgent dredging work was undertaken between November 2015 and February 2016 in order to improve access to the Pleasure Boat Dyke and local businesses, and 3,450m<sup>3</sup> of sediment was removed. The sediment was used to complete the filling of the sediment lagoons at Duck Broad previously constructed as part of the Prisma project as well as the Hill Common site. Additionally, dredging of reed rhizome from angling platforms on the River Thurne was also undertaken and used to top up the lagoons to promote rapid vegetation growth.
- 3.3 Throughout the period water quality monitoring was undertaken on a regular basis, with fortnightly reports provided to stakeholders, which were well received. The data produced showed that there were no prymnesium events to trigger mitigations. It also showed that the use of the 'moon pool' surrounding the excavator bucket was beneficial in reducing suspended solids.
- 3.4 Further to the success of these works, the Project group which includes Norfolk Wildlife Trust has developed the next stage of planned enhancements. These are currently the subject of a planning application which is being handled by NPS on behalf of the Broads Authority. This includes work to restore lost reed bed in the Churchill's Bay and The Studio areas of Hickling, which has received the support of the Upper Thurne Working Group and Navigation Committee, and will allow further dredging to be undertaken from the navigation channel. The application also includes proposed installation of silt curtain along vulnerable reaches of bank, this will

enable monitoring to identify whether reed bed protection can be achieved with a more minimal intervention in future (see Appendix 2).

- 3.5 It is hoped that the planning application will be considered by the Planning Committee on 19 August, and the views of this Committee will be reported to the Planning Officer to consider. Works are expected to take place between November 2016 – February 2017, but will be subject to achieving the necessary environmental conditions as agreed with Natural England.
- 3.6 To support the delivery of the wider Vision for Hickling enhancement work, in particular looking at the land management in the wider catchment which impacts on peat soils and water quality, the Broads Authority is working with partners on a bid for European funding. An expression of interest for ‘Creating A New Approach to Peatland Ecosystems’ (CANAPÉ) was submitted in March, with a decision expected by September. However, in light of the referendum result there is now considerable uncertainty as to the eligibility of projects involving the UK, and alternative sources of funding will need to be explored. RSPB, as lead partner, are currently reviewing the position.

Background papers:	Report to Broads Forum
Author:	Andrea Kelly/ Trudi Wakelin
Date of report:	29 June 2016
Broads Plan Objectives:	BD1, BD2, BD3, BD4, NA1
Appendices:	APPENDIX 1 – Lake Restoration Action Plan 2016/17 – 2021/22 APPENDIX 2 – Plan view on proposed enhancement areas, Hickling enhancement project

## Lake Restoration Action Plan 2016/17 – 2021/22

### 1. Introduction

The Lake Restoration Strategy published by the Broads Authority in 2008 clearly sets out the key challenges and principles guiding the Authority's approach to lake restoration in the Broads. The evidence to guide and inform action is set out in the 'review of lake restoration practices and their performance in the Broads' (2015).

This Action Plan uses the prioritisation adopted in the Lake Restoration Strategy of resources allocated through a risk-based approach, ensuring statutory waterbody targets are met, and enhancement is made of existing good quality sites. The strategy provides a framework for the sustainable long-term management for the Broads, in the face of pressures such as climate change and predicted sea-level rise. This Action Plan assumes that the reader is familiar with the Strategy and simply sets out what needs to be done to achieve the objectives of the Strategy in terms of priority, timescales, costs and partnerships involved.

Analysis of a diverse range of information sources has allowed waterbodies to be prioritised for restoration work, based on ecological and environmental data generated by the Broads Authority, Environment Agency, Natural England and a number of commercial partners.

The Action Plan will be updated as required to review progress and incorporate new information or changing circumstances, including changes to waterbody condition, which may affect prioritisation or delivery of works. These updates will be reported within the Broads Authority committee cycle and placed on the Broads Authority website.

Legislative drivers influencing the restoration work in the shallow lakes of the Broads includes meeting waterbody targets set by the European Union Water Framework Directive (WFD) (2000/60/EC), achieving Favourable Conservation Status for Natura 2000 sites and Public Service Agreement (PSA) targets for waterbodies within Sites of Special Scientific Interest (SSSIs).

This annual Action Plan details the specific investment plans and projects planned for 2016/17 to 2021/22, as prioritised through the Lake Restoration Strategy framework.

Actions for lakes will also help deliver the objectives in the Broads Biodiversity and Water Strategy (2013), which works on a partnership basis, to identify local priorities and to determine the contribution that can be made locally to the delivery of national England Biodiversity Strategy outcome measures. As such, where actions arising from the Lake Restoration Strategy can positively benefit specific Habitat or Species Action Plans important for conservation in the Broads, then these actions will be considered a priority.

## **2. Lake restoration Actions**

Generation of a five year list (2016/17 to 2021/22) of active and potential restoration projects, or actions, which the Broads Authority can take a role in delivering, is given in (Appendix 1). Input to this list of actions within a specific steering group of members from the Broads Biodiversity Group Partnership and Broadland Catchment Partnership and in consultation with Natural England (NE), Environment Agency (EA) and Norfolk Wildlife Trust (NWT) in particular.

The Action Plan includes in-lake restoration works only. There is an aim for the Broadland Catchment Partnership to develop a webmap of wider catchment measures influencing, for example, diffuse water pollution and fish habitat enhancements. The in-lake restoration measures demonstrate the multi-task approach to many of the projects, with feasibility and research work included in the early stages of restoration work at individual sites.

The Action Plan is not intended to provide a comprehensive list of all the lake restoration work that may be undertaken in the Broads, and does not include many routine operations, such as monitoring, invasive species awareness raising and control, pollution prevention with good practice antifoul use and maintenance of trees and scrub at the lake edge. The Lake Restoration Strategy and this updated Action Plan sits within the main Broads Plan to address priority issues that have been identified by some landowners and partners, and on which they are prepared to commit time and resources over the lifetime of the plan. The proposed actions are at different stages, and more ideas may emerge through the development of the life of the plan and through ongoing partnership working with relevant organisations, groups and communities.

The actions are identified to help meet 'good ecological status/potential' as defined by the Water Framework Directive, including 'favourable condition' as defined by the Habitats Directive. Regular monitoring as part of each scheme will highlight any need for changes to the actions and the reasons for them.

### 3. Prioritisation of Actions

Specific waterbodies have been prioritised for action within the Strategy, based on a matrix of the probability of success of restoration and the risk from saline incursion or breach. Potential restoration projects vary in scale between site specific work and sub-catchment actions. Prioritisation of actions has been based on a matrix of the timescale for delivery (see Table 1) and the impact of the project in reducing the identified pressure (effectiveness of measure). The waterbody priorities published in the Lake Restoration Strategy are used as an additional filter to rank projects of similar overall effectiveness, to ensure that actions at the highest priority sites and of greatest effectiveness are clearly identified. Table 1 shows the scoring method to rank each individual action.

Table 1. Effectiveness matrix guiding prioritisation of Actions

IMPACT	TIMESCALE TO DELIVER KEY			KEY
	Short	Medium	Long	Priority for delivery
	<1 yr	2-3 yrs	>3 yrs	
High				HIGH
Medium				MEDIUM
Low				LOW

The Lake Restoration Strategy outlines a “portfolio” approach, whereby a range of projects are to be selected, so as to avoid investing predominantly in “quick win” projects. This enables investment to be spread widely, securing the best possible outcomes for waterbodies across the Broads in the short and longer terms.

### 4. Water Framework Directive

This Strategy focuses on new and ongoing local in-lake restoration measures that require further action. These are referred to as local measures by the WFD River Basin Management Plan (RBMP). National measures such as Water Protection Zones, Water Company spending review, Review of Consents and the Catchment Sensitive Farming Initiative are not considered in the Lake Restoration Strategy. However, the local actions need to be cross referenced to the national measures in the RBMP, and ensure the Broads is prioritised as a target area for national measures. The measures listed Appendix 1 are designed to be ambitious and challenging and realistic and not so aspirational that they are therefore unachievable.

Measures that are assessed as not technically feasible or disproportionately expensive have not been included in this Action Plan.

Since the Lake Restoration Strategy (2008), the combined measures have not, for the majority of broads, achieved the waterbodies targets in the first WFD cycle 2008-2015. This is very likely to be a result of a combination of factors such as the continued inputs and cycling of nutrients, poor littoral margin habitat and lack of water plants and in some cases their propagules (see Lake Review, 2015). These factors result in long response lag of shallow lake ecosystems. Thus the achievement of objectives will continue into the following River Basin Cycles to 2027.

## **5. Review**

It is intended that the work programme will be reviewed annually, to monitor the progress of delivery, and ensure actions are appropriately prioritised given new management requirements and restoration opportunities, and the ability to progress works.

Completed actions have been reported within the following reports: [Lake Review](#), [Summary of actions](#), the ongoing Action Plan is set out in Appendix 1. Consultation with the Broads Forum and Broads Biodiversity Group, Broadland Catchment Partnership members will be undertaken on an annual basis or as required.

Some of the priorities for lake restoration include the extensive in-lake work with Trinity Broads, Hoveton Great Broad and Hickling Broad. It is important that these projects are monitored to understand effectiveness of these measures. Beyond the Hoveton Great Broad Project there is future potential for further restoration via biomanipulation of other Bure Broads, for example Ranworth. Further creation of clear water areas at Barton would enhance the ongoing and gradual ecological restoration.

## **References**

Kelly, A. (2013) Status and lake management activity in the Broads. Broads Authority Report.

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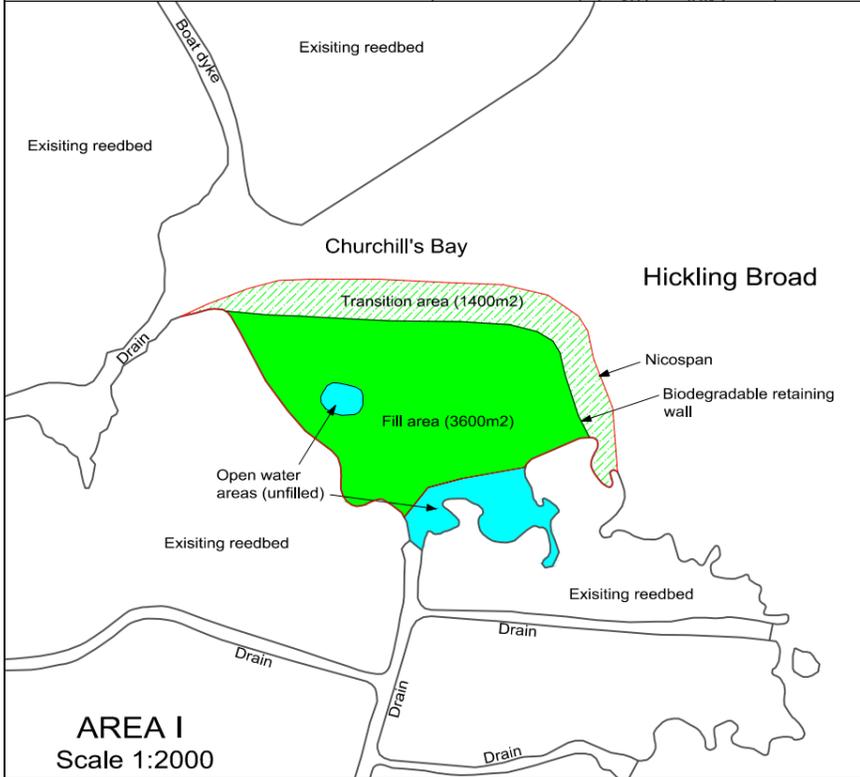
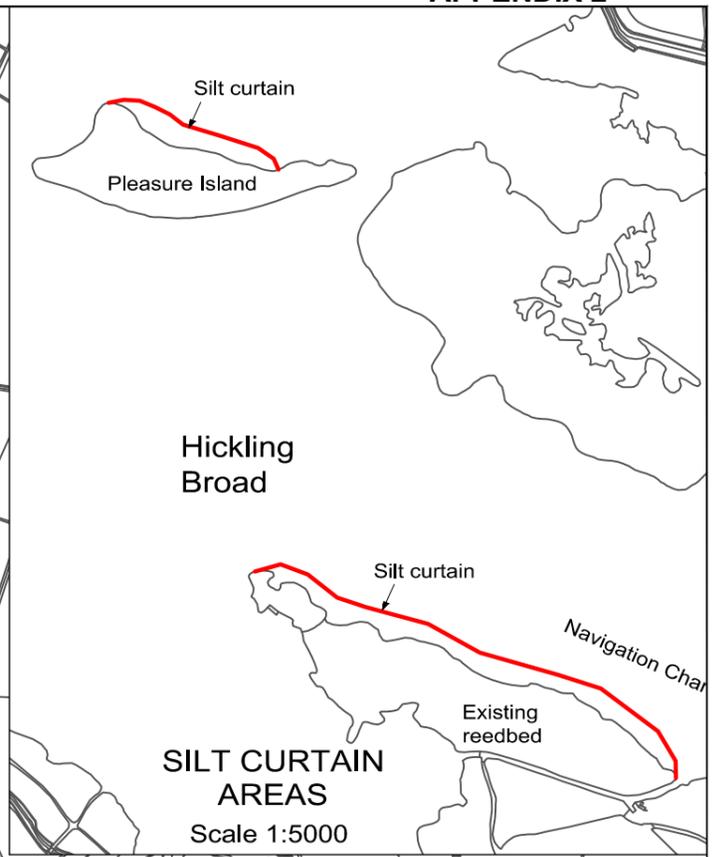
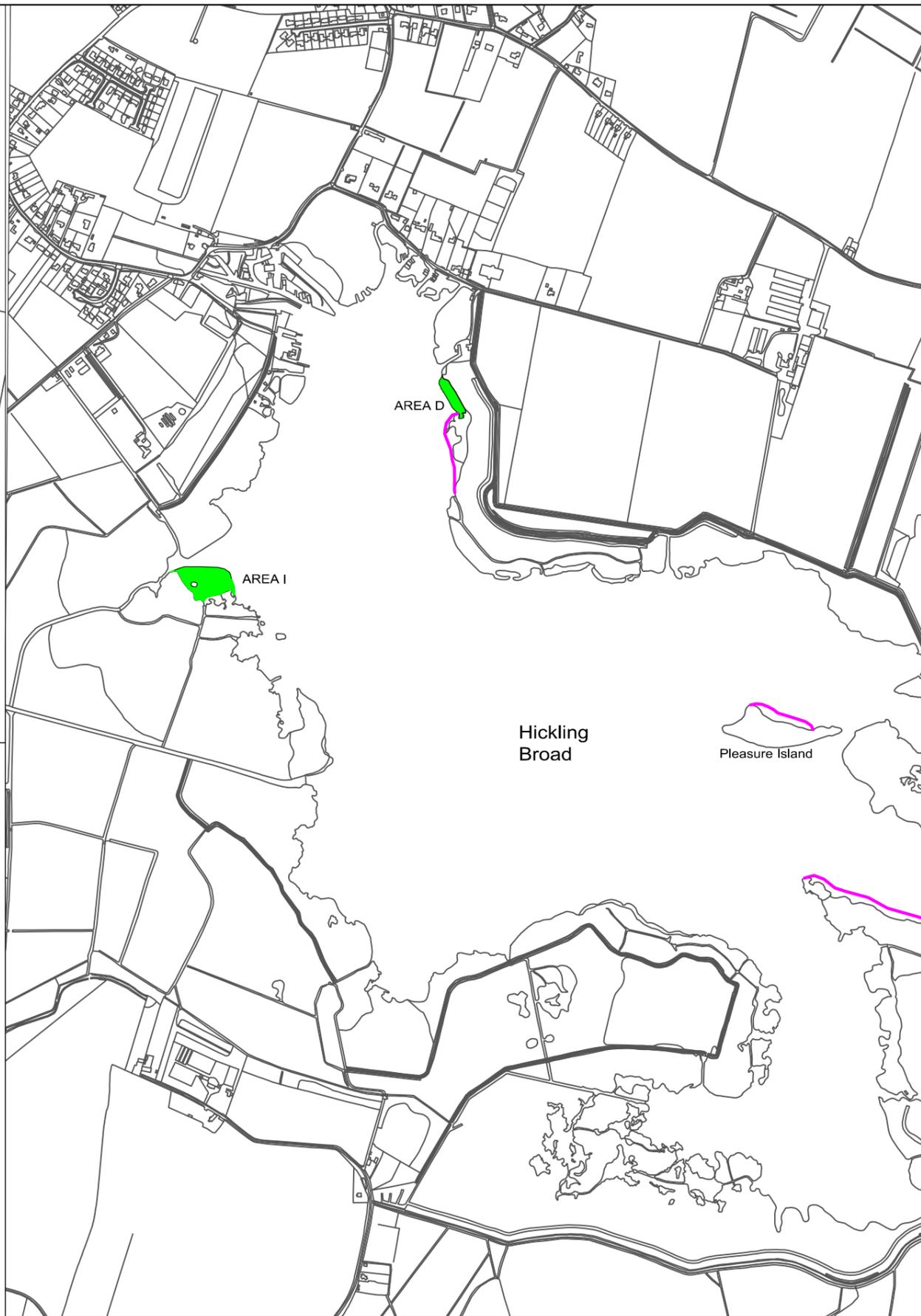
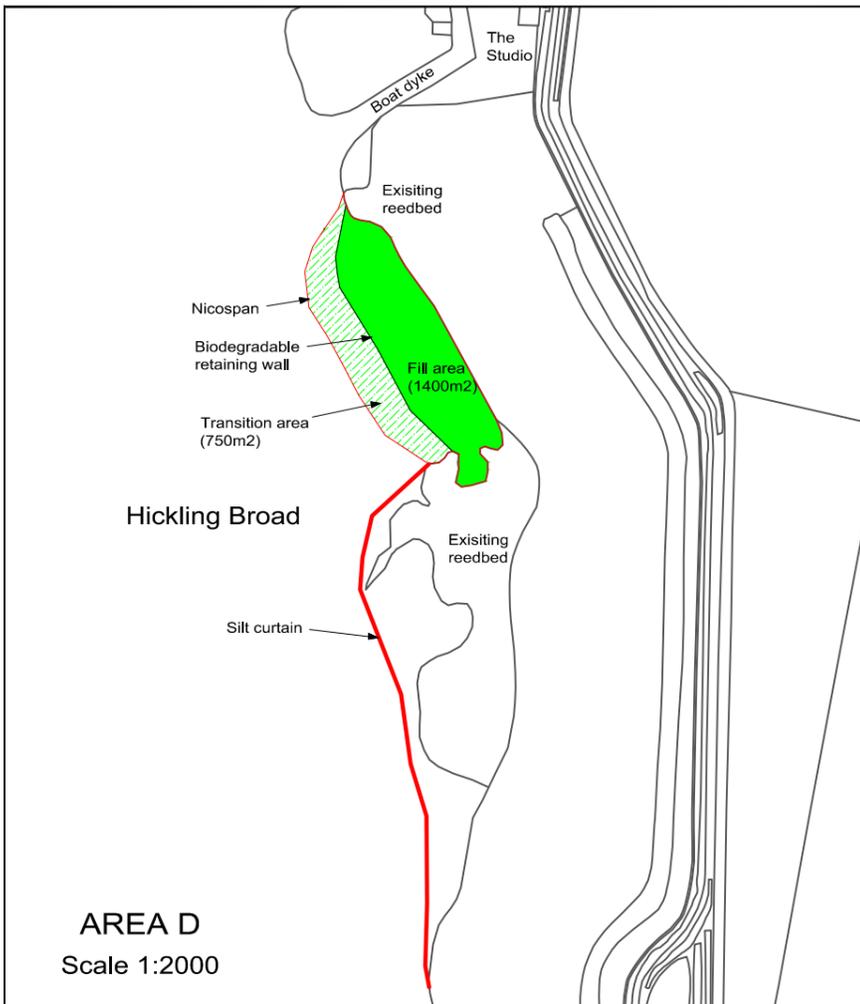
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Phillips, G., Bennion, H., Perrow, M.R., Sayer, C.D., Spears, B.M., Willby, N. (2015) A review of lake restoration practices and their performance in the Broads National Park, 1980-2013. Report for Broads Authority, Norwich and Natural England. Broads Authority.

## Appendix 1

Actions	Lakes	Lake Priority / Action Priority	Timescale and lead	Costs (outside of existing resource)
Sediment removal to meet water abstraction conditions (ecological benefit not principle driver)	Trinity Broads	H / M	2017 E&SW	
Review sediment removal success	Upton Little Broad Trinity Broads (when complete)	H / H H / M	2017 BA/NWT 2020 E&SW	
Review of management and sediment removal	Round Water and Woolners Carr	H / M	2017 NE/SWT	
Specific small catchment nutrient input projects  - Review of domestic sewage input and investigation of first time rural sewerage  - Projects to reduce diffuse pollution in the Whitton Run, informing benefit of connection to Strumpshaw Broad	Cromes Broad  Strumpshaw Broad /Whitton Run	M / H  M / H	2016 BA  2017-20 RSPB/NRT/EA	1,000  TBC
Review of evidence collected for the Brograve trials and set out next steps for water level management  Review of water quality from pumped input with land use change	Upper Thurne Broads	M / H	2016 WMA  TBC EA/WMA	TBC  TBC
Complete initial littoral margin enhancement  Secure funding for and deliver larger littoral margin enhancement scheme	Hickling	M / M  M / M	2016-2018 BA  2017-2022 BA	697,214
Complete reed island creation and review the evidence to assess its function	Heigham Sound	M / M	2016 BA	
Extensive sediment removal and biomanipulation project	Hoveton Great	M / H	2018/19 NE	

Continue with biomanipulation within barriers and review in 2017	Barton	M / M	2016/17 BA	
Complete a feasibility study of further options if there's no improvement to the general ecological condition of the broad		M / H	2017 BA/NWT	
Biomanipulation likely to be successful if agreements and funding can be secured	Burntfen	M / H	TBC	10,000
	Fritton Lake	M / H	TBC	50,000
	Sotshole	M / H	2016/17	10,000 all estimates
Littoral margin enhancements	Wroxham	M / M	TBC	TBC
Continue with biomanipulation within fish barrier and review in 2017.  Site is a candidate for innovative biofiltration via farmed system, although further evidence is required to inform this option	Ranworth	L / H	2016/17 BA/NWT	
		L / M	TBC	TBC
Protection of floating reed islands with goose protection and erosion protection curtains	Rockland	L / M	2016/17 BA	13,000
Further sediment removal required as shallowing is ongoing	Wheatfen	L / M	TBC	TBC



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**GENERAL NOTES:**

**REVISION COMMENT BOX**

Rev.	Date	Rev by.	Chk by

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**Project Title** Hickling Broad Edge Enhancements 2016

**Drawing Title** Plan View on Proposed Enhancement Areas

<b>Date Drawn</b> 28/04/16	<b>Drawing Scale</b> As shown @ A3
<b>Drawn By</b> TJH	<b>Drawing No</b> BA/HB2016/007
<b>Approval status</b>	<b>Rev</b> P1

**Mooring Strategy Update**  
Report by Senior Waterways and Recreation Officer

**Summary:** This report provides members with an update on the Authority's mooring strategy and the action plan to maintain the Authority's moorings that was adopted by the Broads Authority in November 2014. The report summarises the works that have recently been carried out to the Authority's existing moorings and identifies that a number of sites have been prioritised for the development of new 24-hour moorings, safety moorings and demasting moorings. Members' comments on the report are welcomed.

## **1 Background**

- 1.1 The Broads Authority originally published a mooring strategy in 2006 at which time the Authority provided 5,969m of moorings. The need for a strategy to guide the provision of Broads Authority free 24-hour moorings was identified as a priority in the best value review of navigation and supported through the public consultation for the Broads Plan 2004. The original strategy was developed with the guidance of a steering group formed of Broads Authority members and wider consultation was undertaken with a formal consultation group which included representatives from the Authority's partners and stakeholders.
- 1.2 The 2006 strategy was reviewed in 2009 and in 2013 the Authority adopted an Integrated Access Strategy (IAS) for the Broads which sought to make improvements to the connectivity and use of access facilities on both land and water. The overarching objective of the mooring strategy: *"to maintain as a minimum the present number of moorings available for visitor use"* and the other principles of the mooring strategy were carried forward into the IAS. Appendix 1 sets out these principles.
- 1.3 The adoption of the Mooring strategy in 2006 and the IAS in 2013 has resulted in a significant increase in the length of moorings the Authority provides. Currently the Authority provides 7,426m of visitor and demasting moorings over 67 sites. Consequently the Authority's asset management liabilities have also increased considerably. In response to this fact the Authority produced an asset management strategy in January 2014 for the future management and maintenance of all its assets.
- 1.4 Since then the Authority has reviewed the Asset Management Strategy and also reviewed the level of mooring provision that it is appropriate for the Authority to continue to provide. This review was informed by a member workshop which concluded that, if possible, the Authority should continue to

maintain a policy of no net reduction in mooring length although a number of sites were identified by the workshop as not being a high priority to maintain or repile. Two of these sites were Thorpe River Green and a section of the Hoveton Viaduct moorings. The Authority has given notice in respect of Thorpe River Green, and is seeking to renegotiate the Hoveton Viaduct mooring lease.

- 1.5 It should be noted that while there was some appetite for trying to increase the number of free moorings provided by the Authority the mooring workshop recommended that the Authority should not seek to take on new mooring sites if the acquisition of those sites would result in an increase in its piling responsibilities. However, members did consider that the Authority should consider acquiring sites if there was no piling liability connected to them. Subsequently the Navigation Committee was consulted on an action plan for the maintenance of the Authority's mooring assets and the action plan was adopted by the Broads Authority at its meeting on the 21 November 2014. Additionally an annual budget of £150,000 was allocated to cover the costs of maintaining the Authority's piled assets into the future.
- 1.6 In October 2015 the Navigation Committee also considered a report on demasting mooring provision and identified that the high priority sites for demasting mooring provision were at St Olave's Bridge, Ludham Bridge and Acle Bridge. However the Committee did not recommend that budget should be allocated to provide facilities at these sites.

## **2 Review of the asset Management Action Plan for Piled Sites**

- 2.1 The Navigation Committee has given officers unequivocal advice that the Authority should not consider entering leases for mooring sites that require the payment of annual fees higher than those recommended by our property advisers. This advice is informing our lease negotiations and unfortunately has already resulted in the loss of the 24-hour moorings at Woodbastwick and Perci's Island, Horning. Additionally a number of sites are currently, or will shortly be, subject to lease negotiations and the Committee recognised that the continued inclusion of these sites in the action plan was dependent on the successful renegotiation of those leases. The action plan was therefore reviewed by the Navigation Committee in December 2015 and the revised repiling programme that was agreed at that meeting is shown at Appendix 2.
- 2.2 Another factor that has the potential to affect the repiling programme is that the Environment Agency (EA) is currently seeking to pass on liability for piling that is no longer required for flood defence purposes to the owners of the land behind the piling frontage.
- 2.3 Clearly this means that the Authority needs to ensure that its asset management plan is able to adapt to changing circumstances. Officers will therefore annually review the proposed repiling programme to take account of the outcome of the various lease negotiations, the EA's proposals, changes in contractor costs and prices for steel and materials.

### 3 Provision of New Moorings

- 3.1 As mentioned in paragraph 1.5, previous advice from members was that, while the Authority should attempt to increase the number of moorings it provides, it should not seek to acquire sites for the development of new moorings that would add to its asset management liabilities. In practice this means that only piled sites where the piling will remain the responsibility of the landowner can be considered for the development of new moorings.
- 3.2 But it should also be recognised that if sites are lost because of lease issues the Authority may also lose the responsibility for repiling those sites. This does give some potential for taking on new sites that come with repiling responsibilities but only if they replace any lost sites on a like for like basis. The difficulty is that in many cases officers will not know the outcome of lease negotiations for some time and therefore this assessment can only be carried out on a case by case basis as lease negotiations are concluded.
- 3.3 Having considered potential sites, officers have initially identified two possible locations for the development of new moorings which would give the Authority no additional piling maintenance liability while meeting the aims of the IAS. These are at Rockland Short Dyke and Berney Arms. In the case of Rockland the location is in an area with limited mooring availability and the development of a mooring in this location would also be in accordance with one of the key objectives of the Broads Sustainable Tourism Strategy which states: ***“Spreading benefits to all parts of the Broads A number of parts of the Broads experience visitor congestion at certain times while others are under-visited. The imbalance between the northern and southern Broads should continue to be addressed.”*** Providing new facilities like moorings in the southern rivers is essential if this aim is to be realised. As regards Berney Arms, if a greater length of mooring were to be managed by the Broads Authority it would allow for the site to be managed to ensure that moorings are available for vessels waiting to cross Breydon Water. Lease negotiations for these sites are progressing well and if leases are successfully completed construction works at both sites will be programmed as soon as possible.
- 3.4 Other major mooring works that have been carried out recently include the construction of safety moorings on land recently purchased by the Authority at Scare Gap on the lower Bure, emergency mooring pontoons at Mautby and the complete refurbishment of the 24-hour moorings at Somerleyton. Additionally on site works are currently in progress on demasting moorings both upstream and downstream of the Haddiscoe Cut Bridge at St Olave’s through a Section 106 Agreement with the landowner.

### 4 Mooring Maintenance and Repair

- 4.1 Aside from work on new moorings the Authority continues to carry out an ambitious programme of mooring and piling maintenance and repair works throughout the river system. Repairs are carried out to timber capping, mooring posts, path surfacing, timber piles and safety features at all the Authority’s moorings on a regular basis to ensure that the sites are safe for

public use. Major projects are also carried out like the replacement of Turntide Jetty at the confluence of the Rivers Waveney and Yare which was completed last year at a cost of £357,000. An overview of the work carried out by the Authority in the last financial year is shown on the map at Appendix 3.

## **4 Conclusions**

- 4.1 This report identifies that the Authority is working hard to maintain its moorings and also seeking opportunities to increase mooring provision in accordance with the principles of the Mooring Strategy and Integrated Access Strategy. It emphasises that officers are regularly reviewing the action plan for maintaining the Authority's assets and following members' advice regarding the need to continue to provide free moorings and not take on piling liabilities unnecessarily. Members' comments on the report are welcomed.

Background papers:	Nil
Authors:	Adrian Clarke
Date of report:	04 July 2016
Broads Plan Objectives:	NA5, TR2
Appendices:	APPENDIX 1 – Mooring Strategy Principles APPENDIX 2 – Asset management action plan for piled sites up to 2027 APPENDIX 3 – Overview of work carried out by the BA April 2015- March 2016

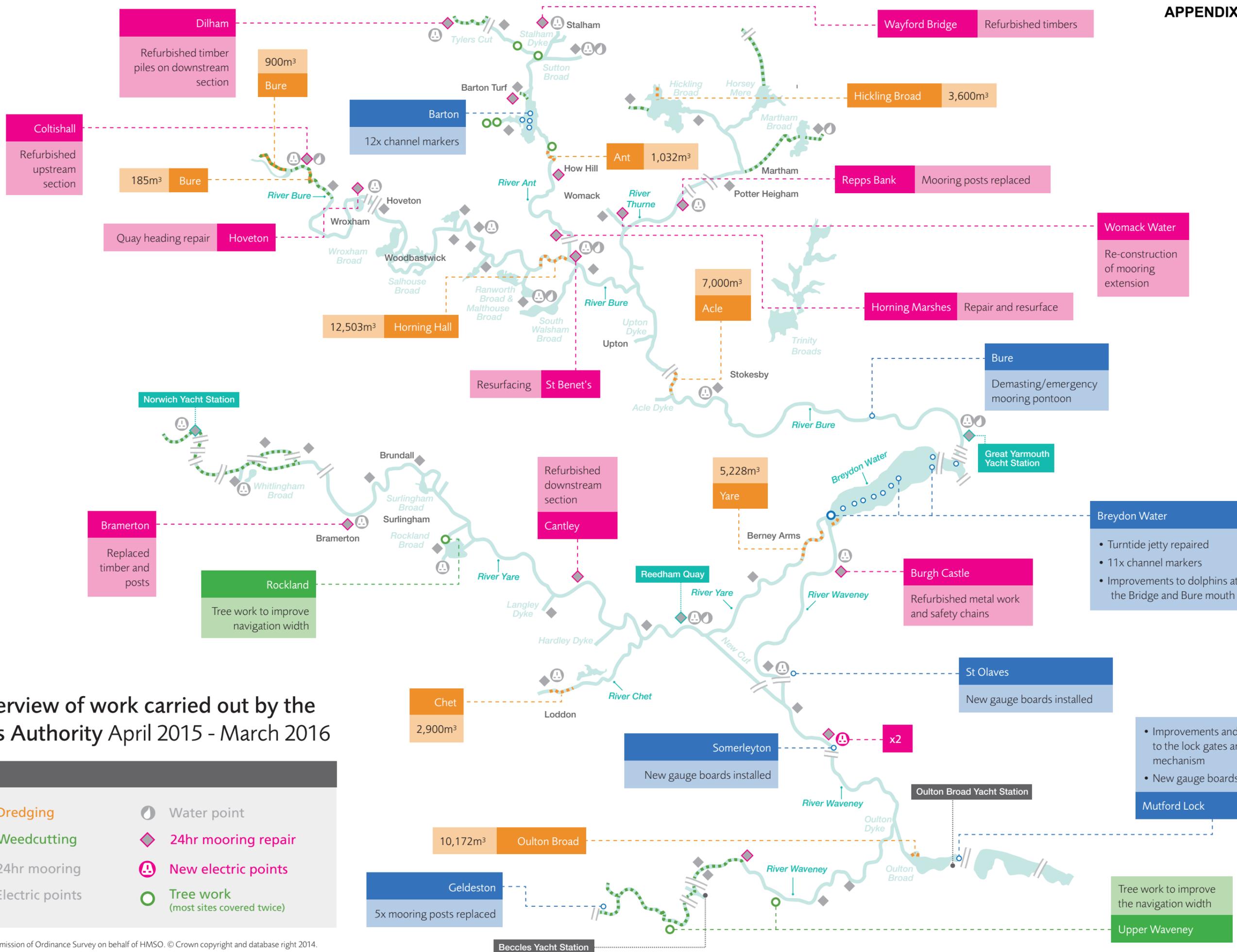
## Mooring Strategy Update

### Principles of 2006/9 Mooring Strategies

- Distribution of moorings – maximum 30 minutes cruising time between sites (“90 minutes for Country Park” moorings).
- Distribution of mooring types - Wild 21%, Rural 36%, Urban 4% Country Park 37%, Flagship 2%.
- Maintain free use of Broads Authority unmanned moorings.
- Protect and enhance existing sites/facilities including working in partnership regarding third party provision.
- Seek contributions/ establish charges for ancillary services e.g. water/ Ranger etc.
- Promote double alongside mooring at appropriate sites and review effectiveness of national schemes.
- Encourage sustainable development of boating and associated infrastructure to be consistent with Water Framework Directive (WFD) and planning policies.
- Ensure sites have no negative impact in environmentally sensitive localities.
- Encourage innovative mooring design to provide habitat opportunities and mitigate landscape impacts.
- Improve the dissemination of information to users, to include location of sites, facilities available and consider a Moorings Code to refer to behaviour.
- Mitigate user conflict through design and alternative provision, i.e. relocate angling to adjacent facilities.
- Strategy to be linked to Broads Flood Alleviation Project, Electric Charging Point strategy, angling strategy, slipway strategy and water related sport and recreation strategy (**now the Integrated Access Strategy**) to consider and encourage partnership development/ funding opportunities.
- Undertake Byelaw enforcement to discourage misuse.

APPENDIX 2

Asset	Length	Life end	Lease end	Action date	Piling - Program me Year	Workshop priority	Comments
Deep Dyke	193	2018	Oct-14	Oct-14	2019	1	Currently negotiating new lease - repile 2018
Deep Go Dyke	112	2022	Oct-14	Oct-14	2021	2	Currently negotiating new lease
White Slea	25	2022	Oct-14	Oct-14	2022	2	Currently negotiating new lease, Potential to not repile but replace with pontoons
Cockshoot Dyke	149	2015	Oct-14	Jul-15	2016	1	Repile 2016 - currenlty negotiating new lease
Loddon Staithe	82	2050	Man Agr	Oct-15	2054	1	SNDC cost
Hoveton Viaduct	319	2015	Sep-19	Nov-15	2017	2	Currently negotiating reduced length obligation to pile
Barton Turf	41	2040	Jun-26	Nov-15	2036	1	Renegotiating new lease
Paddy's Lane	156	2045	holding	Nov-15	2044	1	Currently re-negotiating lease
Bramerton Common	188	2045	Jun-16	Nov-15	2042	1	Currently re-negotiating lease
Rockland St Mary Staithe	81	2050	holding	Jul-15	2052	2	Awaiting outcome of negotiations with RSPB re Rockalnd Short Dyke
Ludham Bridge demasting	20	2015	Licence	2015	2016	1	No licence granted - exited from site
Boundary Farm (Extension), Oby	150	2025		2015	2023	1	Awaiting outcome of negotiations for new 99year lease - currently closed
Boundary Farm, Oby	150	2025		2015	2024	1	Awaiting outcome of negotiations for new 99year lease - currently closed
Thurne Mouth	118	2025	F/H	2015	2025	1	Awaiting outcome of negotiations for new 99year lease - currently closed
Catfield Staithe	36	2030	Nov-16	Nov-16	2027	3	
Thorpe Green	226	2032	Jan-17	Jan-16	2030	3	Given notice to terminate lease
Norwich Yacht Station	507	2025	Man Agr	Mar-16	2027	1	Negotiating with NCC now for next season
Great Yarmouth Yacht Station	535	2030	Man Agr	Mar-16	2028	1	Negotiating with GYBC now for next season
Woodbastwick	93	2019	Jul-16	2016	2020	2	Lease expires - land owner has given notice to terminate
Horning Island/Percis Island	49	2038	Jul-16	2016	2036	2	Lease expires - land owner has given notice to terminate
Aldeby Hall Staithe	44	2045	Mar-17	Jul-16	2041	2	
Cantley	131	2023	Mar-17	Mar-17	2022	1	EA cost as part of flood defences
Burgh Castle	139	2015	Dec-17	Dec-17	2018	1	Annual licence for 5 years- piling at EA cost
Horning Marshes	225	2060	Nov-19	Jan-19	2060	1	Check EA position
Horning Parish Staithe	101	2045	Mar-20	Jul-19	2041	1	
Brundall Church Marsh	40	2042	Jan-21	Jul-20	2039	1	
Somerleyton	140	2053	Jul-25	Jan-25	2055	1	Part EA cost
Ranworth Staithe Dinghy Dyke	50	2019	F/H	2020	2020	1	Timber piling
Ludham Fieldbase basin	80	2020	F/H	2020	2021	1	
Potter Heigham Dinghy Park	60	2020	F/H	2021	2021	1	Replace with dolphins
Potter Heigham Demasting	15	2022	2085	2022	2022	1	Check EA position
Dilham Staithe	50	2023	F/H	2023	2022	2	repairs and drainage work 2016
Worlingham Staithe	30	2025	F/H	2023	2023	1	
Chedgrave Common	39	2040	2023	2023	2036	2	
Turntide Jetty	102	2025	F/H	2025	2025	1	Reconstructed 2015
Potter Heigham Repps Bank	145	2025	2085	2026	2026	1	negotiate with EA
Potter Heigham Martham Bank	144	2025	2085	2027	2027	1	negotiate with EA



### An overview of work carried out by the Broads Authority April 2015 - March 2016

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## Innovative project commended in national awards

**A project to restore an eroded reedbed utilising barricade building techniques used by the Army in Afghanistan was commended at a national awards ceremony.**

The Broads Authority project at Duck Broad was one of four shortlisted for the Environment category in the Living Waterways Awards which took place at a ceremony in London in October.

The project has helped separate the broad from the main channel and improved water quality within it. As a result wildfowl have been seen making their homes there again.

It competed against the Inland Waterways Association Himalayan Balsam Campaign and fellow runners up the River Tale Restoration at Ottery St Mary and Wolvercote Lakes in Oxford.

An independent panel of experts, led by

Christopher Rodrigues CBE, selected the finalists for the awards which were launched by the Canal & River Trust in January in a bid to recognise the most inspiring and exciting waterway-based improvement projects across the UK.

Tony Hales, chairman of the Canal & River Trust, said: "The Living Waterways Awards celebrate the individuals, communities and organisations that have done the most to make a difference to the nation's rivers, canals, lochs, lakes, reservoirs and docks, making them exciting places to live, learn and spend time.

"After a series of visits and assessments, which saw the expert judges travel from

Sandwich to Enniskillen and from Glasgow to Devon, we are thrilled to announce the shortlist of finalists."

The project at Duck Broad saw reinforced steel baskets, filled with rocks and sediment, joined together to make the perimeter of a one hectare spit of land. This was filled with 12,000 cubic metres of sediment dredged from Heigham Sound and planted with common reed and reedmace.

It restored the reedbed to how it would have looked in 1946, based on aerial photography.

The dredging of Heigham Sound to create the reedbed has also improved channel depth for navigation.

## New apprentices

The Authority welcomed three new apprentices this year in a bid to train young people in a range of practical skills and boost the future talent base.

The trio spend a year with the Construction, Maintenance and Environment Team (CME) and will study for a Level 2 Certificate in work-based Environmental Conservation, through Easton & Otley College.

In addition to the academic qualification they will develop practical skills like brush cutter and clearing saw certificates, chainsaw proficiency, first aid, herbicide spraying and work boat handling.

All these skills will be learnt while carrying out practical work projects such as fen management, boardwalk repairs, mooring maintenance, pony movements and checks, erosion protection schemes, quay heading repairs and other works to maintain the environment and Authority assets.

Rob Rogers, Head of CME, said: "This exciting new scheme was developed to address a particular problem in that within the next 10 years more than 75% of our skilled and very experienced workforce within CME will have reached retirement age.

"Recruiting people with the correct skills, good knowledge of the Broads environment, boat handling skills, experience of working

outside in all weathers and a passion for the Broads has proven to be extremely difficult, so 'growing' our own is a big advance forward."

The Apprenticeship Programme is a rolling project and the Authority will start recruiting more young people in July 2016, ready for them to start in September as the first apprentices are completing their course.

Although it is not possible to guarantee any of the apprentices jobs at the end of the year, details will be kept on file so that when a vacancy arises they can be invited to apply.

**Wet Grassland Project**  
Report by Senior Ecologist

**Summary:** Wet grassland is a priority habitat that dominates the landscape of the Broads and rural farming economy (Broads Biodiversity Action Plan, 2009, Biodiversity and Water Strategy, 2013 and Why Farming Matters to the Broads, 2010). Investment in biodiversity is required to enhance bird and dyke wildlife populations of the marshes. This partnership project provides an excellent collaborative model for bidding for Heritage Lottery Funds for biodiversity work. These combined efforts put the Broads as one of the 8-9 national leaders in wetland restoration.

**1 Introduction**

- 1.1 The Broads has around 11,000 ha (c.40% of the area) of wet grassland. Some of this supports wetland birds and rich wildlife in the dykes, although much of the area is in need of biodiversity improvement, with issues from water quantity and quality, impacts of climate change and flooding, as well as negative impacts from encroachment of leisure and household activities onto grazing marshes.
- 1.2 The significance of the Broads is reflected over 1,500 species of conservation concern depending on the Broads for their future. Over 60% of these rarest species depend entirely on good supplies of quality freshwater. The projects restoration of flows of base-rich waters from upland and floodplains and restoration and recreation of wet grassland will be important for UK priority species.
- 1.3 Important work is required to restore and re-create lowland wet grassland and associated habitats as well as adapt management to cope with a changing climate. Working with the 'grain of nature' seeking to re-establish near-natural hydrological processes, where feasible as well as recognising the importance to economy, society is well evidenced through local (e.g. Broads Ecosystem Accounting), national (e.g. England Biodiversity Strategy, Defra 25 year Plan) and international policy and guidance (e.g. Ramsar, Agenda 21 from Rio Earth Summit).
- 1.4 This report provides and update on a partnership project to secure funding to improve wet grassland habitats in the Broads and across the UK.

## **2 The Wet Grassland Project**

- 2.1 This project is a Natural England led partnership programme. It was originally seeking to secure £16 million of external funding to benefit nine landscape-scale wet grassland areas across England. Each will benefit from an average of £1.5 million for delivery of conservation actions and around £250,000 for access and engagement outcomes (the remaining funding will be used to manage the initiative).
- 2.2 It was aimed that the stage one application would be submitted to Heritage Lottery Fund (HLF) on 1 December 2016 and if approved in April 2017, and the development round is successful, delivery will take place over five years from April 2019 with a LIFE funding application submitted in autumn 2017 to provide additional match.
- 2.3 However, in light of the referendum result there is now considerable uncertainty as to the eligibility of European projects involving the UK, and alternative funding plan will need to be explored. The early and initial national steer from Natural England is that it may be possible to go ahead with HLF (and other potential sources), but without EU LIFE. Local discussion has included one approach which may be for the Broads to join with 1-2 other project areas (rather than 8-9 right across the country, as at present). This would allow a smaller combined bid and could possibly include working with the Cambridgeshire Fens. If this bid is under £5M in total we may aim for an early 2017 application window under HLF.
- 2.4 List of potential Partners includes: Broads Authority (BA), Natural England (NE), Norfolk Wildlife Trust (NWT), Suffolk Wildlife Trust (SWT), RSPB, Water Management Alliance (WMA), Environment Agency (EA), Norfolk Rivers Trust (NRT), Norfolk Farm Wildlife Advisory Group (NFWAG). The National Trust has also expressed interest.
- 2.5 As a result of farming interest in wet grassland habitats, Broads Authority and Natural England have informed the National Farmers Union about this bid. In addition the Broadland Catchment Partnership has been informed as a result of the Broads Land Management element of the bid (see 3.4). It is worth noting that most of the funding and projects will occur on nature reserves either owned by RSPB and the Wildlife Trusts, or under agreement with private landowners. The Broads Land Management element of the bid will provide advice and incentives to manage to private landowners who want to be involved.
- 2.6 The Broads Wetland Partnership will significantly deliver against the vision for the re-establishment of lowland wet grassland through a major project of restoration and recreation of wet grassland across 930 ha of protected SSSI and N2K sites in the Broads and North Norfolk. This will be complimented by ground-breaking investigation of hydrological functioning of the floodplain and valley side habitats. In addition to the core areas, the project will impact on a significantly wider cluster area through the engagement of adjoining/

neighbouring landowners through land management advice and control of invasive species with the scope to benefit a further 2500 ha.

- 2.7 The project provides resilience against climate change effects and restores natural ecological functioning at the landscape scale. It also provides significant opportunities for public engagement and appreciation of the Broads landscape that is often difficult from the land. It is highly innovative work that could revolutionise thinking on natural functioning of wetland sites where catch drains are present.
- 2.8 There will be access and engagement projects that sit alongside the wet grassland restoration projects. It is likely that two officers will be appointed, a Project Manager and an Access and Engagement officer.

### **3 Three project components**

#### **Restore and recreate lowland wet grassland across protected sites**

- 3.1 This is the major focus and of the bid. Seven projects will deliver landscape scale benefits against this objective on 930 ha. In each case, the project will support the adaptive capacity by encouraging near natural hydrological functioning. The projects will encompass a range of approaches/processes from establishing holistic water management at Upton Fen (Norfolk) and Carlton/Oulton Marshes (Suffolk) to developing dynamic water level and land form management around Breydon Water. Natural hydrological functioning will also be re-established through the direct reconnection of grassland to the Hickling Broad flood plain and in the Stiffkey Valley through the removal of flood-banks and improved floodplain connection, in conjunction with the relevant authorities.

#### **Catch dyke - restoring the natural hydrological connection between upland and lowland habitats**

- 3.2 A pioneering element of the bid is work is to recreate natural seepage zones at the edge of wetland sites in the valley side area. This may require land purchase and monitoring to assess this trial to bring back more natural groundwater water supply to wetlands.
- 3.3 This is a highly innovative aspect of the project and based on recent research into the role of a catch dyke, it has the potential to revolutionise and inform thinking on the natural functioning of wetland sites in the UK and internationally where catch drains are present.

#### **Broads Land Management**

- 3.4 A minor, although essential, supporting and sustaining part of the bid is coordinated Broads landowner liaison. This will help restore and create buffering schemes that slow water flow” and manage invasive species

3.5 All partners have considerable and well-established mechanisms for landowner liaison in the Broads and much work has been done to date to engage lowland neighbours with appropriate wetland land management. The project would allow for all partners to share best practice and common approaches to engage upland landowners to protect the downslope resource. Opportunities would be given to deal with the considerable challenge of invasive species through direct action by the partners. This non-NGO owned element of the project has already been developed significantly such that we estimate around 2500ha as benefitting from involvement.

#### **4 Conclusion**

4.1 This project is required to support the delivery of local and national targets for biodiversity. We are adapting the projects to be eligible to funders following the referendum result and considerable uncertainty of gaining EU funding that the original project was based around.

4.2 As a partnership project, it is the first time that Broads partners have collaborated on such a wide scale to seek funding for common goals for biodiversity. This may a model for future habitat-wide funding bids in the Broads.

Background papers:	None
Author:	Andrea Kelly
Date of report:	4 July 2016
Broads Plan Objectives:	BD1, BD2, BD3, BD4
Appendices:	None

## **Chief Executive's Report**

**Summary:** This report summarises the current position in respect of a number of important projects and events, including any decisions taken during the recent cycle of committee meetings. It does not include matters which are already on the agenda for this meeting. Members are asked to note the report.

### **1 Network Rail**

Contact Officer Angie Leeper /Broads Plan Objective: NA5

- 1.1 Network Rail has now published the Anglia Route Study - an important milestone in the development of the railway in East Anglia. The document, part of the Long Term Planning Process (LTPP) considers the potential outputs required by the railway network within the Anglia Route in Control Period 6 (2019 – 2024), as well as further ahead up to the year 2043. It offers funders sets of choices as to how these outputs might be met, having regard to value-for-money, affordability and efficient delivery.
- 1.2 In the study under Appendix B Option Assessment, option 3 it states the option to double the single track section over Trowse Bridge and Trowse Lower Junction.
- 1.3 A copy of the full report can be found by following this link  
<http://www.networkrail.co.uk/long-term-planning-process/anglia-route-study/>
- 1.4 Network Rail are also considering the railway upgrade plan in respect of Somerleyton and Reedham swing bridges, and Mott MacDonald have been appointed to carry out a multi criteria analysis of the options and are in the process of contacting key stakeholders to participate in the process.

### **2 Toll Plaques**

Contact Officer/Broads Plan Objective: John Packman/Bill Housden/ None

- 2.1 At the Authority's meeting on 18 March 2016, Members considered a report on the difficulties that had occurred with ink running on some of this year's toll plaques as an item of urgent business due to the need to consider a solution and take a decision before the 1 April 2016. The options included moving to a paperless system removing the requirement to print and display a plaque, similar to the DVLA vehicle licensing system.

- 2.2 Members of the Navigation Committee, representatives of the Broads Hire Boat Federation and the Norfolk and Suffolk Boating Association were consulted prior to presenting proposals to the Authority. The legal issues relating to byelaws were investigated and the Solicitor advised that he was satisfied that the Authority had the freedom to act as proposed. Boat owners would still be able to renew their licence on line, by post or in person, and they would be sent a receipt, which would be proof of payment. The number of the boat and its name still has to be displayed. Consideration was also being given to developing an app for Rangers' phones so as they could check boats using a hand held device rather than laptop computers. Such a scheme could alter the way the Rangers worked enabling them to focus on other duties to the overall benefit of the Authority. Members gave consideration to the potential risks particularly that of failure to pay a toll and loss of income through evasion, and enforcement issues. However, it was clarified that the Collector of Tolls monitored the income on a regular basis and would be able to track any significant divergences, which might require remedial action.
- 2.3 The Authority considered that the proposal would be an excellent opportunity to embrace a more up to date system, but given the potential risks, including reputational risk, agreed that it be considered as a trial for a year and reviewed at or before the end of December 2016.
- 2.4 The early indications are that it has been a success and income from private boat owners is a little up on what was predicted for this year,

### **3 Tolls Review Group 2016**

Contact Officer/Broads Plan Objective: John Packman/Bill Housden/ None

- 3.1 The Tolls Review Group has now met on nine occasions between October 2015 and May 2016 and considered a number of options and scenarios whilst analysing the impact these would have on the entire Fleet, both private and commercial. The Group have been mindful of the complexity of the matter and the results of the Stakeholder Survey and the challenges from the Hire Boat sector.
- 3.2 A workshop for all Authority Members including the Co-opted members was held on 21 April 2016 to present the Group's initial thoughts, and to gain some feedback. Following further work, another workshop was held on 14 June 2016 to which key stakeholders were invited.
- 3.3 The second workshop aimed to provide the key organisations representing the private and commercial fleets in the Broads with a brief review of the progress being made by the Tolls Review Working Group. The Group presented the Drivers for Change, the Principles by which the TRG was working and further details on the strategic proposals for a new structure system for collection of navigation charges. Those present were invited to consult their respective organisations and provide comments by the end of July.

3.4 A report was presented to the Financial Scrutiny and Audit Committee on 5 July 2016 which was reported in the EDP. The Navigation Committee will be consulted on the Working Group's proposals at its meeting on 8 September before it goes to the Broads Authority for approval on 30 September.

#### **4 Royal Norfolk Show - 29 and 30 June 2016**

Contact Officer/ Broads Plan Objective: Lorna Marsh/PE1/PE2

4.1 Members will recall that the Royal Norfolk Agricultural Association (RNAA) invited the Authority to coordinate exhibits to create a "Broads village" at this year's Norfolk Show in order to promote the special qualities of the Broads to local people, highlight it as an important resource in the County and showcase all those involved in various ways with it.

4.2 We were delighted with the response from colleagues in Broads' organisations – both charities and companies – who agreed to join us. The result was that the Broads Village was a huge success both in terms of the feedback from the stall holders, the view of the RNAA and the general public. The Authority's stand, included the boat Liana and the fen harvester to prompt discussions on sustainability and management of the fens. The highlight of our attendance was a visit by HRH the Prince of Wales and the Duchess of Cambridge and receiving the Somerleyton Cup for the most effective conservation or environmental exhibit.

#### **5 Tesco "Bags for Help" Award**

5.1 The Authority has won an award of £12,000 from the Tesco "Bags for Help" scheme. This will be for the construction of a new wildlife pond at Whitlingham Country Park for pond dipping, educational visits and the relocation of the low ropes course, originally funded by South Norfolk Council, to the Outdoor Education Centre.

#### **6 Waste Disposal Review**

Contact Officer/Broads Plan Objective: Angie Leeper/ TR2.2

6.1 Officers have been in discussion with the local councils in respect of the ongoing concerns regarding waste provision in the Broads. A member workshop has been arranged for the 15 July to consider the current situation and options for the future and an update will be given at the meeting.

#### **7 National Parks Plan**

Contact Officer/ Broads Plan Objective: John Packman/ None

7.1 On 23 March Liz Truss, the Secretary of State for the Environment, launched an 8-Point Plan for England's National Parks in the South Downs. A copy of the Plan can be found at the Defra website via the following link:

<https://www.gov.uk/government/news/new-plan-for-national-parks-gives-every-schoolchild-a-chance-to-visit>

The Plan is heavily focused on the second National Park purpose, in the Broads Authority's case: – “promoting opportunities for the understanding and enjoyment of the special qualities of the Broads by the public”. The Plan is born out of Ministers' enthusiasm and support for National Parks and the work of the authorities. It is very much their plan but nevertheless fits rather well into much of what the Authority is already doing or plans to do. The Plan includes a case study from our Landscape Partnership Scheme, “Going the Extra Mile”, referenced on page 16.

- 7.2 There are no additional resources provided for the delivery of the objectives in the Plan but rather that they will be delivered through the collective effort of the 9 national park authorities and the Broads Authority. Park authorities will focus their attention on different elements of the Plan so that it does not mean that there is an imperative to change direction but rather consider how the National Park Plan relates to the priorities in the Authority's emerging new Broads Plan. Therefore, the relevant items in the National Parks Plan will be considered alongside the review of the Broads Plan in the Autumn.

## **8 Strategy and Action Plan for Sustainable Tourism in the Broads 2016 – 2020**

Contact Officer/Broads Plan Objective: Lorna Marsh/Bruce Hanson/ TR1

- 8.1 Members will recall that you received the Draft Strategy and Action Plan for Sustainable Tourism at your meeting on 4 February and provided the Authority with comments. At the Authority meeting on 13 May 2016, the Authority received, welcomed and adopted the final version of the Strategy and Action Plan. The Authority considered the consultee responses received following the five week consultation period together with the response from the Habitats Regulations Assessment which confirmed that the strategy conformed with the required legislation.
- 8.2 The three top priorities identified within the Strategy for completion in year one are:
- To develop and maintain a high quality up to date destination website
  - To develop and maintain a strong digital/social media presence and PR Activity
  - To develop and package high profile wildlife experiences

The Authority will be working closely with Broads Tourism in the delivery of the actions. The consultation responses and final plan may be viewed from our website:

[http://www.broads-authority.gov.uk/\\_data/assets/pdf\\_file/0008/756926/Sustainable-Tourism-Strategy-0416.pdf](http://www.broads-authority.gov.uk/_data/assets/pdf_file/0008/756926/Sustainable-Tourism-Strategy-0416.pdf)

## 9. National Park Partnership

Contact Officer/Broads Plan Objective: John Packman/ None

- 9.1 The National Park Partnership was launched on Monday 9 May 2016, details of which can be found via the Authority's website. <http://www.nationalparks.co.uk/>  
The new board was pursuing a number of possible sponsorship ideas examples of which included outdoor clothing companies, retailers and vehicle manufacturers. The initiative has already helped the Authority and as a result active discussions are taking place with one of the major supermarket companies about how it might support the Authority's catchment work.

Background papers: None

Author: Sandra Becket / Esmeralda Guds  
Date of report: 11 July 2016

Broads Plan Objectives: Multiple

Appendices: None