

Broadland Catchment Partnership - Steering Group Meeting

MINUTES



Thursday 14th December 2017 (10am – 12.30pm)

Broads Authority, Yare House, 62-64 Thorpe Road, Norwich, NR1 1RY

Attendees: Andrea Kelly (chair), Katy Anderson, Zak Battams, Robert Camps, Richard Cooper, Vittorio Danino, Simon Hooton, Matt Jones, Emily Long, Richard Mason, Amy Prendergast, Neil Punchard, Ian Skinner, Alison Smyth, Sarah Taigel, Robin Twigge, Rob Wise, Lottie Carlton (minutes).

Apologies: Barry Bendall, David Diggins, Mark Henderson, Rob Holland, Karen Kramer-Wilson, Keith Lead, Richard Reynolds, Rory Sanderson, Heidi Smith, Paul Sorrell

	Action items
1.	Welcome, introductions, apologies
	Attendees were welcomed to the meeting and introductions were made. Apologies as above.
2.	Minutes of the meeting held on 19th Sept 2017
	Minutes: The minutes were agreed as a correct record. The actions were completed.
3.	Collaboration and innovation between business, policy and civil society organisations
	<p>Vittoria Danino, gave a presentation updating partners on the Anglian Centre for Water Studies, a collaborative project between Anglian Water (AW) and the UEA with strategic objectives covering Climate change, Psychology, Markets Policy Regulation, Environmental Sustainability, Opportunities, Future Strategic Vision with population growth a key factor affecting the above. Events include: AW/UEA Workshop on 29th January; Symposium for External Stakeholders on 14th April (all welcome to attend).</p> <p>Comments and answers to questions:</p> <ul style="list-style-type: none"> • The project started in Feb 2017 (the email for getting in touch is info@acwaterstudies.org). • Essex & Suffolk Water also have similar plans to AW for drought/flooding • Ofwat now use the 'People come first' terminology rather than impacts/benefits. • Academic research funding deadlines are very tight - PhDs looking at public interactions with sustainability and water use and value of water to society. AW is looking at whether to support. AW is partnering on a RISE bid research by NERC looking at impacts on society.
4.	BCP website and projects database
	<p>Sarah Taigel, Broadland Catchment Coordinator, gave a presentation on the new Broadland Catchment Partnership (BCP) website and project database. The remit for the website is that it is intended to provide catchment info, data and mapping and to promote events and activities for the catchment and sub-catchments. Currently the website is a 'holding page' on the Broads Authority website. Sarah then discussed how data between partners may require data sharing agreements and she would discuss further when she met with each lead partner.</p> <p>Comments and answers to questions:</p> <ul style="list-style-type: none"> • The website was welcomed by the group and suggestions from the group will be taken into account. It will go live towards the end of February. • ST will meet with key partners to collate info/photos of project work before March. • ArcGIS is being used. To protect privacy, mapping does not include exact locations or contact information of landowners. • www.gridreferencefinder.com can be used to find coordinates for project mapping. • The use of the project database should help with partnership work co-ordination/avoiding duplication.

	<ul style="list-style-type: none"> • The website is aimed at the informed public, researchers and stakeholders. • Links to partners' websites can be included. • BA communications team is assisting with providing summaries of any text heavy sections.
5.	Project funding opportunities
	<p>Natural Flood Management The locally submitted projects for the £1million fund were not successful. Funding will be sought from RFCC instead. Application deadline 25 January 2018.</p> <p>WEIF underspend Capital funding available. Information circulated by EA and NE in separate emails.</p> <p>Launch of new Water Environment Grant scheme There is a new funding scheme available for projects that will improve the water environment. This is in addition to the current Water Environment Improvement Fund. For more information follow the link to the latest briefing document on CABA website: Water Environment Grant - Nov 2017. Pre-application discussions are starting now, please contact Rory Sanderson to discuss any project ideas (rory.sanderson@environment-agency.gov.uk or 02030255442).</p> <p>Anglian Water Around £30K is likely to be made available to the BCP for an on-the ground project around river habitat in line with the Broadland Rivers Catchment Plan. This is a result for an environmental undertaking for a category 3 pollution incident at a water recycling centre and the Environment Agency are keen that the money is spent delivering environmental improvement via catchment partnerships. The BCP is awaiting a response from Chris Gerrard as to whether the funds will definitely be available either in this or the next financial year.</p>
6.	Wensum DTC update presentations
	<p>Richard Cooper, Wensum DTC, gave a presentation on the mitigation measures/sediment trap stage of the research at the Wensum DTC. Sediment traps were installed in Oct 2016 and effects are being monitored. Aerial drone footage taken. Estimation of 5-6 years for cost recovery. So far the traps have halved the amount of sediment getting into watercourses in this area.</p> <p>Comments and answers to questions:</p> <ul style="list-style-type: none"> • The BCP welcomed these really positive results and welcomed that Defra is being consulted regarding potential to support future policy. • Loss of soil off field and loss of productivity need to be included in cost/benefits. Could be done by calculating catchment soil depth and loss of phosphorus vs fertilizer costs. • The research is publicized at DTC meetings, using a flier (circulated), through academic literature and via Defra. • Most of the monitoring is carried out by students. <p>GIS assessment modelling for agricultural diffuse pollution Zak Battams, UEA student, gave a presentation on his project looking at GIS modelling for agricultural diffuse pollution. The desk-based assessment tool identifies susceptible sites via GIS mapping at road and river intersections. Examples were shown of the modelling vs the situations on the ground in the Glaven valley area.</p> <p>Comments and answers to questions:</p> <ul style="list-style-type: none"> • Limitations to the modelling: Soil type and precipitation events not considered but overall the modelling works. • EA/Norfolk FWAG would be interested in the results as they are considering putting in silt traps in the Glaven area. RC/ZB to circulate links to the relevant reports when they are

	<p>completed.</p> <ul style="list-style-type: none"> Some inputs may be missed if only road/river junctions are considered, but as a simple and cost effective initial assessment this is a useful model and thanked ZB for developing this tool which could be used in many areas of the catchment
7.	Partner updates
	Updates were provided prior to, and further additions supplied subsequent to, the meeting (see below).
8.	BCP key activity since the last steering group meeting
	Members were sent updates prior to the meeting.
9.	Any other business
	<p>Buglife report on impacts of neonicotinoids</p> <p>Article in EDP on 14 Dec 2017 with quotes from Rob Wise who referred to the BCP activity. Anglian Water and Essex & Suffolk Water were not contacted about the article. A ban on neonicotinoids is looking more likely. The report quotes data from a limited time period. Some members thought that Buglife's wording was a little dramatic. Some members were not surprised that neonicotinoids are found in river water and they would welcome seeing comprehensive information on the entire catchment.</p>
10.	Date of next meeting
	Doodle poll to be circulated (March 2018).

Action Summary

Who	What	Deadline
ST	Meet with key partners to discuss how the BCP Coordinator role can support them, and collate info/photos of project work	30/03/2018
ST	Include partners website details on the BCP Website	30/03/2018

Visit: www.broadlandcatchmentpartnership.org.uk to download the catchment plan.

Email: admin@broadlandcatchmentpartnership.org.uk for further information.

Partner Updates: Broadland Catchment Partnership: 14th Dec 2017 Steering Group Meeting

Country Land and Business Association

- Leaving the European Union also means leaving the Common Agricultural Policy (CAP). Having the freedom to develop a new policy to replace the CAP in the future is a major opportunity to improve farm profitability, recognise the multi-functional nature of land management, and support the wider rural economy, in a new and innovative way.
- In order to address this the CLA proposes a new system based on the award of contracts to farmers and landowners. The Land Management Contract would be a legal agreement between the farmer and the government for provision of goods and services that the market doesn't pay for but provide valuable benefits to society. The proposal for a new land management contract sits alongside measures to improve the profitability of farming through increased productivity, market development and resilience, as well as wider support for the rural economy. This framework is set out in the first document in the New Opportunities Investment series, which is available here: http://www.cla.org.uk/sites/default/files/HowTo_LMC_Doc2.pdf.
- The Land Management Contract is a new way by which farmers, foresters and land managers are rewarded for their time, costs and expertise in managing land in ways that benefit society. Above all it creates a transparent and accountable way for public money to be used to deliver benefits for the taxpayer. To ensure the taxpayer receives value for money, the contracts will contain defined measures and outcomes based on science and evidence, and societal needs. The activities and outcomes of a contract will be selected by the land manager, but will reflect the needs and priorities of the local area.

Environment Agency

Consultation

The Environment Agency have just launched a consultation on proposed changes to our charges for a wide range of activities. The proposed changes are due to take effect from April 2018. The new charge proposals cover a wide range of activities including:

- Environmental Permitting Regulations 2016 //
- Proposed new charges for permits to undertake Flood Risk Activities on main rivers including river habitat enhancement work and eel passage improvements, construction of footbridges, river bank re-profiling works, cattle drinking bays and replacement of culverts etc. are included here.
- Planning advice
- Marine licences

You can view the consultation on our e consultation tool [here](#). The consultation runs until **12 January 2018**. It will be helpful if you can respond to this consultation between now and 12 January.

New Farming Rules for Water

- From 2 April 2018 new rules for all farmers in England will be introduced to help protect water quality, by standardising good farm practices that many are already performing and offering a new approach to regulation.
- In essence the rules require farmers to:
 - Keep soil on the land;
 - Match nutrients to crop, and soil needs, and
 - Keep livestock fertilisers and manures out of the water.

<https://www.gov.uk/government/publications/farming-rules-for-water-from-april-2018/farming-rules-for-water-overview>

Launch of new Water Environment Grant scheme

There is a new funding scheme available for projects that will improve the water environment. This is in addition to the current Water Environment Improvement Fund. For more information follow the link to the latest briefing document on CABA website: [Water Environment Grant - Nov 2017](#). Pre application discussions are starting now, please contact Rory Sanderson to discuss any project ideas (rory.sanderson@environment-agency.gov.uk or 02030255442).

There will be a workshop on the Water Environment Grant on 22 January, from 10am – 2pm at Red Lodge Millennium Centre, Bury St. Edmunds, Red Lodge IP28 8TT. Please email CAAWFDDELIVERY@environment-agency.gov.uk to register your interest.

RFCC Local Levy Natural Flood Management Allocation

New funding scheme available for projects within the Anglian Eastern Regional Flood and Coastal Committee (RFCC). The RFCC have made £750,000 of local levy available over the next three years (2018-2021) for natural flood management projects. Individual projects can receive up to £50,000 providing they:

- Demonstrably reduce flood risk to people and property
- Enhance biodiversity and improve habitats
- Have appropriate monitoring to increase the evidence base for NFM
- Are delivered by working in partnership

Applications must be from a risk management authority (County Council, District Council, IDB) or from a relevant charity such as Rivers Trust, Wildlife Trust etc. Individuals and groups must partner with such an organisation to be considered. Applications must be received on by 25 January to the EA Catchment Delivery Manager (Rory Sanderson for Broadland and North Norfolk). Forms and further details available. Award will be competitive with projects judged against set criteria. Please contact Rory direct (rory.sanderson@environment-agency.gov.uk or 02030255442) if you want to discuss or receive further information on the process and the application form.

Fish tracking on Broadlands

The Environment Agency has started a major fish tracking project on the Broadland tidal rivers. The project aims to understand more about the natural behaviour of adult bream and pike within the Broadland system to help improve and target future management actions. The work will also provide a valuable insight in to the impacts of saline incursion events and prymnesium outbreaks in the Thurne system. Nearly 100 adult fish have been tagged with the help of volunteer anglers, and these fish are now being tracked around the rivers by a network of hydro acoustic receivers placed at strategic locations. The work is being managed by Steve Lane of the local EA fisheries team.

New farming rules for water

This publication summarises the ‘farming rules for water’ which we will be introducing from 2 April 2018. The rules will require good farming practice, so that farmers manage their land both to avoid water pollution and to benefit their business.

<https://www.gov.uk/government/publications/farming-rules-for-water-from-april-2018>

Scarrow Beck

We have just completed some river restoration work, in partnership with Norfolk Rivers IDB, along the Scarrow Beck, a tributary in the Upper Bure catchment. The project aimed to improve river habitat for fish and to carry out sustainable maintenance. There are areas of bare ground following the work but in time this will green over: water crowfoot and brown trout will flourish. The influential land owners we’ve worked with are really pleased with the outcome and have already invited interested locals to see it.



Before: steep banks and channel trying to recover to more natural dimensions



After: more natural bank profile, which allows river to spill out with a shallow fast flowing section during normal flows.



Before: channel choked with Bur-reed growth



After: Berms on each side give a more sinuous channel, the gravel bed and varying depths will reduce Bur-reed growth

Broads Authority

- **CANAPE** North Sea Region Project is in start-up and is appointing a Project Manager. First meeting in the Netherlands in April will include the use of PCLake model for shallow lake restoration support tool. <http://northsearegion.eu/canape/about/> A network for Paludiculture is developing within the UK.
- **Catch-dyke** project planned at several Broads sites is in feasibility stage. Catch dykes are watercourses that often exist at the break of slope between the 'upland' and the floodplain. Their function is to improve land drainage by picking up and removing surface and groundwater flows between the upland and floodplain. Following concerns about their impacts on wetland integrity over a number of years within the Broads, a project was initiated to review the literature, investigate the functional role of catch dykes, develop a decision making process for identifying future management options, and initiate a number of case studies to contribute to understanding their role (OHES, 2014). The study found that catch dykes can have a highly significant impact on the hydrological functioning of the floodplain and valley side habitats, and yet they have been given very little attention in either research literature or site managers' management considerations. Their impacts can be broadly summarised as:
 1. changes of groundwater quality experienced by floodplain wetlands;
 2. depletion of the wetland water balance, both within the floodplain and valley sides;

3. direct drawdown of the wetland water table, both within the floodplain and valley sides;
 4. delivery of nutrients and other agrochemicals to internationally important wetlands;
 5. generation of acid sulphate pollutants;
 6. interruption of the hydrosereal sequence from dry to wet communities, including potential impacts on the upper floodplain fens; within the Broads the valley side communities have largely been lost, and may have contained very important features such as SAC alkaline fens (M13).
- The next stage of the work on catch dykes took the very significant initial findings to fully develop two case studies to implementation stage. It is expected that the Broads Authority will continue to work with Natural England and submit a Water Environment Grant.
 - **Trinity Partnership** – Ormesby sediment trap seems to be working well. Eel survey, completed by E&SW, has to determine there is no impact of the abstraction intake. Trinity Management Plan is currently being updated and comments from stakeholders being incorporated. E&SW Mud pumping project is completed and review is ongoing, early signs of good water plant growth following sediment removal.
 - **Norfolk Non-Native Species Initiative (NNSI)** – Projects and costs submitted as part of the **WEG** development process. **Three Sub-groups active** and co-ordinating floating pennywort, mink and crayfish control, with specific action project on Himalayan balsam, giant hogweed, crassula etc. **New NNSI website** nearly complete. **RapidLIFE** project has been successful and has funding for knotweed and balsam treatment in the Wensum. Expect contact soon if you are working on this rivers. **RiverLands** is focusing on northern Bure control with River Care volunteers organised by AW. **CABI rust biocontrol trial** sites are being assessed and expected to be confirmed soon.
 - **Broads Biodiversity Partnership** commented on functional floodplains. The noted discussion is below. Further discussion with BA and Broads Forum member has been helpful in clarifying the outstanding questions.
 - *Don't do Barton. This is currently poorly understood, some units are in unfavourable condition and unwise to open to the river before more is understood about this fen. Clarification needed about the objectives and the evidence to consider, particularly revisiting water quality in the Ant.*
 - *If opening areas of floodplain to the river is being considered there was strong support for the Bure loop being a better option for habitat creation and building resilience for sea level rise, to maximise biodiversity, society and economic benefit. For example building in recreational element and scope for multi-agency approach seemed like a strategic approach.*
 - *Complex issue. Need to define why putting resource into categorising changeable status of river/floodplain. Understanding/modelling the functional floodplain is the role of the EA regarding putting water in a safe space to protect people/properties. The evidence around the importance of 'flushing systems to improve reed/sedge' would need to be reviewed.*
 - *One person/area issue driving this forward. Engagement with public without sufficient scientific knowledge could create issues. It may be that wider issues, such as emphasis on connecting arable land with rivers instead could be higher priority in the Broads Plan.*
 - **Functional Floodplains:** Further informal discussion has occurred around 'functional floodplains', with Richard Starling/ BRASCA keen to interact with the Broads Biodiversity Partnership to identify sites where re-connection might help management by BRASCA members. Sarah Taigel has produced a draft information sheet about floodplains as a starting point to inform people on the role of floodplains and potential issues. There could be complex site specific issues to resolve to re-establish functional floodplains although a pivotal point would seem to be being able to identify the water quality in rivers by those sites. This may therefore give another banner to press for further action on water quality. The next step is likely to be a meeting of interested parties to capture the issues and consider the willingness to explore solutions. If sufficient convergence can be found then a plan of action can evolve.

UEA/Wensum DTC

- Phase 2 of the Wensum DTC officially ended in September 2017 and decommissioning of field monitoring equipment was due to commence this winter. However, in mid-November, Defra verbally agreed to continue financially supporting the DTC platform through to April 2019 with the addition of £200k of new investment. Planning is now underway to develop a new work programme for the next 16 months, which will likely involve greater emphasis on pesticides, soil health and branching out to work on other farms.
- UEA are submitting a £650k bid for a 3-year NERC Standard Grant, led by Dr Nikolai Pedentchouk and Dr Richard Cooper, investigating the extent to which ancient (>100 years) carbon is being released from agricultural soils into rivers and subsequently lost as CO₂ to the atmosphere. The project will build upon the Wensum DTC platform at Salle to examine whether reduced/zero tillage could be used as an effective mitigation measure to reduce carbon losses from soils relative to conventional ploughing.

River Waveney Trust

Our main three projects continue to progress, namely:

- 1) The first phase of Geldeston Lock restoration using the services of the Waterway Recovery Group is now complete and a celebration day was organised in October. For details go to the BBC link - <http://bbc.in/2zwwGbs>
- 2) Frenze Beck wildlife reserve at Diss - our committed group of volunteers have been working on creating more dead hedging and clearing the invasive willow. Many different bird and mammal sightings have been made.
- 3) The eel project is slowly moving forward. Any Hindes, our fisheries consultant, has been electro-fishing on the Waveney and 18 eels have been found so far, mostly downstream at Wainford!

Natural England/CSF

Countryside Stewardship

- 2018 - Closed for Mid Tier end of Sept 17 – c. 3900 applications currently being processed - (around ¼ WQ standalone).
- Higher Tier 450 applications accepted/ 400 referred to Mid-tier (approximate national figures). CSFOs currently checking/approving capital grant elements requiring their approval.
- **1/1/2019 start – details/application launch on .Gov 15th Jan- 4 new simplified/ streamlined application packages-** arable package available online from 20/2- capital items not available via this route, for details <https://www.gov.uk/government/news/countryside-stewardship-detail-of-new-simplified-offers>.
- **Earlier closing date for applications 31/7/18. 9 options previously only available in HT now also available to MT.**

New Farming Rules for Water- come into force 4/18

<https://www.gov.uk/government/publications/farming-rules-for-water-from-april-2018/farming-rules-for-water-overview>

Events

- Maize & Grassland 17/10 –event postponed to 30/11 – still poor attendance.
- Itteringham 18/10 – 10 attendees.
- Joint CFE Events 6 & 28th/11– Resource protection
- Tyres, traction, compaction event with AHDB (very successful –repeat planned)
- BCP Salle event 15/11

<ul style="list-style-type: none"> • Wensum DWPP event 27/11. • AHDB Pork – Pig Group progress continues – FW article 24/11,p30. <p>Mud on road campaign</p> <ul style="list-style-type: none"> • Awaiting stats from PlantLife on the ecological importance of road verges (vital and last habitat for some East Anglian grass species). Propose new funding bid next year. • Additional Broadland CSFO's to cover the River Wensum and Yare catchment to be in post in next few weeks.
<p>Anglian Water No update provided.</p>
<p>Essex & Suffolk Water</p> <ul style="list-style-type: none"> • So far this has been a very good year with regard to Metaldehyde detections in the Waveney. We have not had to use the emergency bores and what river exceedances we have had have been able to be managed by altering the normal on-site bore and river blend. The exception to this has been on the Bure which had uncharacteristically high metaldehyde readings at the beginning of December which resulted in use switching of the pumps for 1 day. • The recent rainfall (45mm at Harleston this weekend) has started field drain flows and we expect to see Propyzamide in water quality samples across the Waveney catchment for the next month
<p>Internal Drainage Board No update provided.</p>
<p>National Farmers Union No update provided.</p>
<p>National Trust HLF Riverlands project funding bid was not successful. Looking at alternative funding options.</p>
<p>Norfolk County Council No update provided.</p>
<p>Norfolk FWAG No update provided.</p>
<p>Norfolk Rivers Trust Permission received for integrated wetlands below Gresham sewage works. Phosphate mapping on Bure.</p>
<p>Norfolk Wildlife Trust The Wendling Beck and Blackwater project will start in the Spring of 2018.</p>
<p>RSPB</p> <ul style="list-style-type: none"> • Halvergate Fleet Scheme Project: Re-routing Fleet to better supply water to Berney Marshes reserve. Construction has taken place. Site visits welcomed. Presentation to come to future BCP meeting. • Ant Valley abstraction renewals – RSPB comments are being considered and the impacts of the catchment as a whole.
<p>The Rivers Trust No update provided.</p>
<p>Broadland Catchment Partnership Officer Water Sensitive Farming 2016-2018 Salle event Our joint 'Farm Methods and Machinery' event with Catchment Sensitive Farming, and Wensum</p>

Demonstration Test Catchment was held at Salle village hall in November.

Some of the UK's leading soil specialists and agricultural engineers gave presentations that were very well received by the 46 attendees including 20 farmers and 20 farm advisers.

Inter-row cultivation, cover crops and controlled traffic farming were all discussed as methods to improve profit and reduce run-off. For report [click here](#). For EDP article [click here](#).

Site visit

The WWF project manager and new BA Director of Strategy & Sustainable Communities were taken to the seven silt traps at Mill Farm, Great Witchingham that were designed by Matt Philpott, Norfolk Rivers IDB.

Water quality and sediment sampling by a UEA student is continuing to monitor any improvements as a result of the schemes. A relatively high run-off risk site is upstream of the monitoring point so the results could prove interesting if there are any heavy rainfall events over the winter.

Future funding

A meeting is scheduled for 11 December between the Rivers Trust, Norfolk Rivers Trust, and Broads Authority to discuss future funding of 'Water Sensitive Farming'. Discussions between WWF and Coca-Cola around funding for a continuation of the project have been positive.

Tesco pilot

A report will be produced by the Broads Authority and submitted to Tesco at the end of January to evaluate the pilot project to date. Tesco are keen to continue to support farmers in the catchment and neighbouring Cam and Ely Ouse catchment and the Wonder Wheel will be available for vegetable farmers to use free of charge in 2018.

Events

The Campaign for the Environment Resource Protection Event at Mill Farm, Great Witchingham run by Norfolk FWAG and FWAG East in November was well received and helped to publicise the silt traps we installed.

The Defra SIP workshop at Morley in October included a variety of updates on new decision support tools. Of most relevance to the BCP was the Land Utilisation and Capability Indicator tool with field level mapping. See: <http://lucitools.org/> and <https://catalogue.ceh.ac.uk/documents/adead10b-a6a0-45fa-b350-acd16b23c3fe>

Natural Flood Management

Environment Agency staff visited the Natural Flood Management scheme site location on the Camping Beck upstream of at Buxton to install level loggers as part of their pre-scheme monitoring. Flood modelling for the River Bure is being extended upstream into the Camping Beck. A meeting with the landowner is will hopefully occur later this month or early in 2018.

Website

Sarah Taigel has done an excellent job in developing a BCP web site and collating and presenting project data for the benefit of all partners. Progress to date will be presented at the Steering Group meeting on 14 December 2017.

Neil Punchard 04.12.2017