

September 2012

## Catchment workshop



# Working towards a sustainable Broadlands River Catchment

Thursday 13<sup>th</sup> September 2012 - The King's Centre, Norwich

## Full Participant Outcomes Report

### 1. Outcomes report

The one day workshop was organised to enable key stakeholders to consider opportunities and consider implications of a more integrated approach to Broadlands River catchment

The report was compiled by independent facilitator Peter Woodward, who also ran the workshop. It contains outcomes from the day as written on work boards by participants. It will therefore make most sense as an aide-mémoire to those who attended the workshop.

### 2. Participants

First Name	Surname	Organisation	Job Title	Email
Kelvin	Allen	Angling Trust	East of England Chairman	kelvinallen@btinternet.com
Andrew	Alston	NFU	Farmer	andrew.alston@farmline.com
Louis	Baugh	Broads Authority and NFU	Farmer and Broads Authority Member	lbaugh@netcom.co.uk
Barry	Bendall	Rivers Trust		Barry@theriverstrust.org
Giles	Bloomfield	Broads Internal Drainage Board	Catchment Officer (Eastern)	Giles@wlma.org.uk
Dave	Brady	National Trust	Head Warden	dave.brady@nationaltrust.org.uk
Alex	Collins	Centre for Environmental Policy, Imperial College London	Postgraduate Researcher	alexandra.collins07@imperial.ac.uk
John	Currie	Broads Angling Strategy Group / Pike Angling Subgroup	Member/Chairman	curriejohn16@yahoo.co.uk
Mike	Davidson	Broadland Environmental Services Ltd.		
Sarah	Dawkins	Natural England	Team Leader – Norfolk & Suffolk Land Management Teams	sarah.dawkins@naturalengland.org.uk
Nicolas	Deane	NFU	Farm Manager	nick@burefarm.co.uk
Alex	Dinsdale	NFU	Countryside Policy Adviser	alex.dinsdale@nfu.org.uk
Geoff	Doggett	Waveney River Trust	Chairman	geoff@smartangles.com; geoffdoggett@gmail.com

Kevin	East	Canoe England	Waterways & Environment Manager	kevin.east@canoe-england.org.uk
Mike	Evans	NSBA/RYA		mike.evans@dial.pipex.com
Victoria	Fradley	Natural England	Catchment Sensitive Farming Officer, Bure Ant and Muckfleet	victoria.fradley@naturalengland.org.uk
Tony	Goodwin	Broads Internal Drainage Board	District Engineer	tony@wlma.org.uk
Paul	Hammett	NFU	Policy Adviser	Paul.Hammett@nfu.org.uk
Bernard	Harris	Great Yarmouth Borough Council	Service Development Manager	Bernard.harris@ncsgrp.co.uk; bh@great-yarmouth.gov.uk
John	Hiskett	Norfolk Wildlife Trust	Senior Conservation Officer	JohnH@norfolkwildlifetrust.org.uk
Dan	Hoare	Broads Authority	Project Design Supervisor	dan.hoare@broads-authority.gov.uk
Robert	Holland	Essex and Suffolk Water	Catchment Adviser	robert.holland@nwl.co.uk
Simon	Hooton	Broads Authority	Head of Strategy and Projects	simon.hooton@broads-authority.gov.uk
Andrea	Kelly	Broads Authority	Senior Ecologist	andrea.kelly@broads-authority.gov.uk
Claire	Lorenc	Essex and Suffolk Water	Catchment Team Leader	claire.lorenc@nwl.co.uk
Andrew	Lovett	UEA	Professor of Environmental Sciences	a.lovett@uea.ac.uk
Bridget	Marr	Environment Agency	Catchment Delivery Officer	bridget.marr@environment-agency.gov.uk
Kevin	Marsh	Broadland Environmental Services Ltd.	Technical manager	marshk@halcrow.com
John	Packman	Broads Authority	Chief Executive	john.packman@broads-authority.gov.uk
Margaret	Palmer	Buglife		Bmpalmer@aol.com
Tim	Papworth	NFU member	Director	Tim@lfpapworth.co.uk
Alison	Parnell	Environment Agency	Area Environment Manager (Monitoring)	alison.parnell@environment-agency.gov.uk
Andrew	Raine	Environment Agency		andrew.raine@environment-agency.gov.uk
Rachel	Rees	Environment Agency	Senior Environment Planner (Water Quality)	rachel.rees@environment-agency.gov.uk
William	Robinson	Essex and Suffolk Water	Water Resources Manager	william.robinson@nwl.co.uk
Rory	Sanderson	Environment Agency	Catchment Delivery Manager (Norfolk)	rory.sanderson@environment-agency.gov.uk
David	Shearing	Broads Angling Strategy Group / Norwich Union Angling Club	Member	djshearing@live.co.uk
Nigel	Simpson	Natural England	Catchment Sensitive Farming River Basin Co-ordinator	Nigel.simpson@naturalengland.org.uk
Tim	Strudwick	RSPB	Mid Yare Reserves Site Manager	tim.strudwick@rspb.org.uk

Louise	Taylor	Environment Agency	Broads Officer - Analysis & Reporting	<a href="mailto:louise.taylor@environment-agency.gov.uk">louise.taylor@environment-agency.gov.uk</a>
David	Thomas	Waveney Lower Yare & Lothingland Internal Drainage Board	Surveyor	<a href="mailto:dwgthomas@btinternet.com">dwgthomas@btinternet.com</a>
Henry	Walker	Farm Conservation	Farm Conservation Adviser	<a href="mailto:henry@farmconservation.co.uk">henry@farmconservation.co.uk</a>
Mark	Watson	Norfolk Rivers Trust	Director	<a href="mailto:director@norfolkriverstrust.org">director@norfolkriverstrust.org</a>
Russell	Wilson	Broads Authority	Waterways Recreation Officer	<a href="mailto:russell.wilson@broads-authority.gov.uk">russell.wilson@broads-authority.gov.uk</a>
Rob	Wise	Country Land and Business Association	Regional Adviser	<a href="mailto:rob.wise@cla.org.uk">rob.wise@cla.org.uk</a>
Peter	Woodward	Quest Associates	Facilitator	<a href="mailto:peterwoodward@questnet.co.uk">peterwoodward@questnet.co.uk</a>

### 3. Towards a shared vision

The following draft was offered as an ambitious vision for the Broadlands River catchment in 2027, to coincide with the water framework Directive key date:

*'The precious nature of water is widely recognised. People are well informed of the challenging targets to improve water quality, water supply and flood protection and this has motivated many more to change their practice and make a positive contribution. These contributions routinely bring multiple benefits and wildlife dependent on water is thriving. Communities embrace and celebrate water bodies in their local environment and their enthusiasm and expertise is sought as part of decision making processes. Recreation use of water has increased in a sustainable way. The common belief is that the water environment is in a far better shape than in 2012 and becoming adapted to future climate change.'*

Participants considered the draft and offered the following key comments/additions:

- Locally informed action delivers what is needed
- Make more positive about business/landowners benefits from whole water cycle
- Emphasise sustainable agriculture
- Agriculture well adapted to climate change and meeting market demands without impacting the environment
- Sustainable land and water use through education
- Valued so a shared commitment to make a difference
- Economic - the value of water
- Too generic/recognise and protect the special species and habitats of the Broads - seeing the wood for the trees - priorities recognised.  
Enhance/protect special character and distinctiveness of the Broads
- Maintaining opportunities for the Broads to continue evolving and adapting
- Public capacity building to keep people well informed and engaged

#### 4. Making connections

Participants were encouraged to link up in conversation with others in the room as a basis for fostering relationships for change.

Participants also wrote on a card as follows in response to the opening statement 'I'm a really useful person because....

Name	org	I'm a really useful person because.....
Andrew Alston	NFU	I turn sunlight, water and nutrients into food! I understand water resources
Kelvin Allen	AT	Community leader energy for change
Mark Andrews	EA	Where water is needed I can help with abstraction licensing advice. I'm really keen to hear about new ideas to make better use of available water and will try and make them happen
Barry Bendall	RT	I am involved with other catchment-based initiatives in other catchments and can help share knowledge and best practice
Tim Blackmore	AWS	My role in Anglian Water is regionally driven but focus on catchment management, be it STW discharges to the environment and the network that feeds those STWs. How our assets affect the catchment as a whole
Giles Bloomfield	BIDB	Specialist engineering skills (flood risk) Deliver WLMP engaging wide spectrum of stakeholders daily. Open minded
Jeremy Bloomfield	EA	Because of my understanding and interpretation of flood risk, in relation to the wider environment
Dave Brady	NT	I am a practical generalist who's not afraid to take risks and implement new ways of doing things and I am prepared to challenge existing and possibly entwined methods and ideas
Graham Brown	NCC	My role covers local flood risk management across Norfolk Coordinates all organisations classed as risk management authorities in Norfolk Provides strategy, policy and plans for local flood risk
Alex Collins	CEP	Academic reviews of catchment management, policy and legislation, particularly the WFD
John Currie	BASG	I will contribute and pressure the governing bodies to make sure we can achieve the goal of the 2027 vision
Nick Deane	NFU	I control land adjoining rivers/catchment
Mike Davison	EA	I/we/BFAP have proved record of getting stuff done!
Sarah Dawkins	NE	I have financial incentives to help land managers and businesses change their practices to take more account

		of environment and water and become more sustainable
Alex Dinsdale	NFU	I represent those who farm in Broadland - ie businesses which feed us all and have a massive role to play in water management
Geoff Doggett	RWT	I can start community volunteering groups. I know my area and communities very well
Kevin East	CE	Canoe England promotes good environmental practice for canoeing in the freshwater and marine environment. Canoe England as part of the British Canoe represents 100,000 canoeists
Mike Evans	NSBA	I represent the main water borne recreational use of the Broads
Steven Falk	Buglife	Critical expertise in invertebrate conservation available to partnership Much experience of wetland conservation
Victoria Fradley	CSF	Working within the local agricultural community with partners and stakeholders to make positive behaviour changes to reduce the risk of diffuse water pollution from agricultural operations and holdings through advisory events and access to grant funding
Tony Goodwin	BIDB	Local water management and engineering expertise
Paul Hammett	NFU	I know lots of farmers and I understand how too much and too little water affects food production
Bernard Harris	GYBS	Coastal manager - flooding from seas. SWMP - water runoff from land and roads
John Hiskett	NWT	I'm a key contact for our organisation which generally doesn't have staff resources to engage with broad brush issues
Dan Hoare	BA	I am highly motivated to make sure the Broads are managed in a sustainable way for people and wildlife
Rob Holland	ESW	I'm finding evidence and communicating the findings to industry and communities
Simon Hooton	BA	Enthusiastic about 'integrated', knowledgeable about climate change adaptation needs and will talk to anyone about it
Andrea Kelly	BA	My post is about integrated water management with all Broads catchment players 'creating partnerships is me!'
Steve Lane	EA	I'm helping to build partnerships in the Broads rivers catchment to bring together people, enthusiasm, expertise and problems. By building links and sharing benefits with others. We are collectively delivering solutions (and making the world a better place for fish!)
Victoria Lemmon	AW	Can influence the quality of water released into the environment via AW assets

Claire Lorenc	ESW	My team of catchment advisers can help with advise, events, access to funding to reduce agricultural diffuse pollution and improve water quality, while supporting the vital contributions that farm businesses make to society
Andrew Lovett	UEA	Research capability and facilities - invasive species, water quality, biology, water abstraction
Bridget Marr	EA	I have a broad knowledge of the rivers in Norfolk and their management, and the enthusiasm to use this to improve them
John Packman	BA	The Authority is a dynamic institution that works well with partners, welcomes change, and wants to continue to be a leader in its field and enhance the qualities of the Broads
Alison Parnell	EA	I want to make things happen, enthusiastic and enjoy working with people. Can help make a change
Andrew Raine	EA	Pollution response and regulation, fish, invasive species, water quality, biology, water abstraction
Rachel Rees	EA	I can collate data/information/evidence to help inform communities about what needs to be done I can inform what water company improvements will be made (water quality wise)
Will Robinson	ESW	I work for a water company who works to reduce customer demand and therefore abstraction and who is keen to work with others to reduce pollution and improve water quality
Rory Sanderson	EA	I may have some access to money, or be able to help secure funds for improvement projects I can provide data and interpretation on river quality from EA
Dave Shearing	BASG	I believe that I have the knowledge to understand the needs of wildlife (especially fish!) in the Broads catchment during future changes
Tim Strudwick	RSPB	I know how to create and restore wildlife habitats and connect people and wildlife Also can bring in funding from various sources to partnership projects
Louise Taylor	EA	Up to date information about water quality status of broads communication link between EA and external people/organisations
David Thomas	IDB	Agricultural water management soils/draining experience!
Henry Walker	FC	I am meeting Broadland farmers on a regular basis and can feed back opinion from the ground
Russell Wilson	BA	I have links to many recreation organisations and

		promote integrated access
Rob Wise	CLA	I can bring landowners to the discussion bringing their ideas to the table and bring other people's views to landowners
Peter Woodward	QA	Experienced facilitator - encourages fresh approaches to problem solving through effective participative working - use me to create energy for change and powerful outcomes

## 5. Views on integrated Catchment Management

Participants were invited to place a 'sticky dot' along an opinion line to indicate their view in response to two questions

### Question 1:

*'Is the integrated catchment management approach the right way ahead for us?'*

23	11	8	4	0	0
<b>Definitely!</b>		<b>Yes with caveats</b>		<b>Definitely not!</b>	

Participants who had scored in the 'yes with caveats' category gave the following additional comments:

- Don't try to cover everything
- Beware grand plan - think localism
- Low priority issues also have value - esp locally
- Can we break down into manageable sub areas/catchments
- Consensus not always possible
- Beware of high level being too remote

### Question 2:

*'Overall, how are we doing at the moment?'*

0	3	8	10	10	14
<b>Sorted!</b>		<b>Some good progress</b>		<b>Hardly begun!</b>	

Participants who had scored in the 'sorted' category gave the following additional comments:

- Tweaks rather than fundamental change needed
- Farmers have already made huge changes - no longer primarily their problem

## 6. Principles/practice for more effective collaborative working

Participants were invited to consider the key ingredients to ensure effective collaborative working, as follows:

- Trust and reliability



- Be aware of preconceptions
- Accepting and taking risks
- Be passionate and listening (flexible)
- Be the change
- Empowerment and be able to make decisions and commit resources
- Good chairing and facilitation (beware of conflicts of interest)
- Data sharing internal and external
- Evidence based - sound science
- Integrated science and evidence
- Measuring progress and next steps
- Information sharing
- communicate
- Better use of social media (@andrewraineea)
- Visit each other's places of work and activity
- Report early wins
- Establish task and finish groups
- Be realistic
- Agree targets and time frames
- Shared objectives as a reason for shared action
- Clarity of roles - who's doing what?
- Recognising links and strengths
- Recognise value of volunteering
- Localised networking, but don't meet for the sake of it
- Appropriate scale for discussions/business
- Engaging effectively with politicians
- Make it fun!

## 7. What issues could be better tackled through a greater integrated catchment management approach?

Participants in groups were invited to identity two issue areas that could be better tackled through a greater integrated catchment management approach?

These were collated and participants indicated their preference for making some immediate progress using two 'sticky dots'. The outcome of this exercise is as follows:

No.	Issue area	votes
1	Fragmented Agri-advice	14
2	Integrated sediment management - tackle at source	12

3	More multiple benefits from flood management schemes eg habitat creation	11
4	Growth and development leading to reduction in water quantity and quality?	11
5	heavily modified rivers	8
6	Rural septic tanks not as good as they should be	6
7	Development of a Broadland economic model for ecosystem services ASAP	6
8	Research into prymnesium (toxic algae) and impacts on ecosystem and fisheries and economy	6
9	Non-native species risk to reduction of biodiversity	4
10	Not enough water in the catchment. We need to find ways of sharing it	4
11	Enabling people to understand more about their local water environment (at home and at work)	3
12	Managed retreat	0

Participants agreed to take the top six issues for further discussion at the workshop. They then chose one of the six issue areas to develop using four discussion prompts:

1. Further scoping of the issue area
2. Creative integrated ideas
3. Stakeholders who need to be involved
4. Next steps from today

## **7.1 Fragmented agri-advice**

### **Scoping**

- Need to start talking beyond diffuse pollution
- Tree planting for shading, morphology of watercourse
- Diffuse pollution
- CSF, contractors, ESW, EA, CFE, WAV RT, agronomists
- Fellow farmers, FWAG, RSPB, MSG, Agents, FIAs, VI, NE
- Biodiversity
- SWT, NWT, RSPB, Buglife, NE, EA, RDBs, CFE, FWAG
- Volunteer naturalists, county council, farm assurance (red tractor)
- Run-off and flood risk
- EA, LLFA, RDB, DCs, Broads Authority

### **Stakeholders**

- As above plus

- Farmers; Landowners; Contractors; Employees
- Processors
- Buyers
- Local community
- Land agents
- consumers

### Creative Ideas

- Partnerships/collaborative working
- Continuity
- Single approachable contact
- Broadland website
- Need to be able to identify solutions, not just problems
- Data sharing/audit
- Farmer/stakeholder sign up to share information

### Next Steps

**Key issue area drivers:** Alex Dinsdale (NFU) and Will Robinson (ESW)

**Key next task:** Set up task and finish group to look at creative ideas. Alex Dinsdale to set up meeting to initiate Task and Finish Group - who is doing what and where and to whom. Alex to explore interaction with Norfolk Campaign for the Farmed Environment (LFE)

Name	org	commitment
Jeremy Bloomfield	EA	Flood risk and flood management
Sarah Dawkins	NE	My team provides a wide range of advice to landowners and I'm keen to make that more integrated and efficient
Nick Deane	NFU	Farmer and land manager
Alex Dinsdale	NFU	Working with farmers and broad range of businesses and organisations in the county
John Hiskett	NWT	Initial contact - specialise in advising owners of county wildlife sites (CWS)
Rob Holland	ESW	
Steven Falk	Buglife	National entomologist - an provide advice and information to inform broads decision making re insects and invertebrates
Victoria Fradley	NE	Providing farmer advice and training on soil and land management etc to reduce diffuse water pollution links to ES
Claire Lorenc	ESW	Happy to be included in task and finish group. Rob Holland is our Catchment Adviser for Bure and Waveney and is an advice provider/deliverer
John Packman	BA	I will commit the BA and support this when

		appropriate
Alison Parnell	EA	Know a person who can support developing creative ideas, taking forward. Am chair of EA Agri Sector Planning process - can bring national ideas/action
Rachel Rees	EA	Data/advice. Would like to be involved in broadening the scope of advice provided
Will Robinson	ESW	My team provides agr-advice in the Broads
Nigel Simpson	NE	Needs to fix it <u>with help</u>
Tim Strudwick	RSPB	Will pass on relevant RSPB contacts for farmland advice
Henry Walker	FC	Happy to provide agri env advice to landowners/farmers

## 7.2 Integrated sediment management tackled at source

### Scoping

- There's too much!
- Understand sources - where is it coming from?
- Understand impacts - environmental/economic
- Environmental: dramatic environmental changes
  - Loss of habitats
  - Reduction of water quality
  - Reduction of species diversity
- Economic
  - Reduction in tourism
  - Loss of soil
  - Dredging costs
  - Loss of fertilizer

### Creative ideas

- Target sites for sediment traps
- Sediment fingerprinting
- Naturalisation of river processes allows natural deposition/trapping through restoration. Aim to reduce human input
- Event monitoring at a farm - make it relevant to landowner through demonstrating economic impact - eg loss of fertilizer
- PES opportunities

### Stakeholders

- Producers? - farmers, highways agency, watercourse managers
- Influencers - landowners, fisheries, mill owners, EA/AWS/NE, RSPB, CSF, NT
- Affected? - fisheries, farmers, navigation authority, home owners, tax payers, wildlife trusts, ports

- 'solvers of problem' - farm advisers, rivers trust, NE, AWS and ESW, land managers, research (UEA)

### Next steps

**Key issue area drivers:** Louise Taylor (EA) Victoria (NE)

**Key next task:** Develop action plan

Review and collate current data on sediment sources and pathways and impacts. Find the gaps!

Prioritise risks eg vulnerable sites

Address risks

### Other next steps

- Engage with the issue - internally/externally (eg farmers)
- Evaluation of past and current work. Share successes/knowledge in partnership
- Evaluation of source to pathways to impacts of sediment in the Broads
- Identify measures for priority sites/land - map of sites?
- Economic assessment
- Best practice case studies/measures
- Collection of all sediment tools developed. Toolbox of guidance
- Realistic aspirations - what is the expected sediment level in Broads lakes?

Name	org	commitment
Barry Bendall	RT	Sediment is integral to integrated catchment approach
Dave Brady	NT	River naturalisation allowing sediment mobilisation and trapping - biodiversity
Alex Collins	ICL	ICM studies and sediments and heavy metal studies in the Broads
John Currie	BA	Pike Angling sub group BASG PASG share data with DIC and PAC
Nicolas Deane	NFU	Farm and land manager
Dan Hoare	BA	BA erosion protection and habitat enhancement projects
Rob Holland	ESW	Bure and Waveney Catchment. Will - good farmer in Essex
Victoria Fradley	NE	CSF - working directly with land managers to prevent soil erosion into water courses
Bernard Harris	GYBC	Sediment in run off from land into drains and flooding of homes
Andrea Kelly	BA	Broads Sediment Management Strategy sediment input study available

Andrew Lovett	UEA	Research and monitoring and measures
Louise Taylor	EA	'Gateway to EA' phosphorus and sediment investigations + project. Current status of Broads and issues
Russell Wilson	BA	Broads Authority Sediment Management
Henry Walker	FC	Happy to offer advice to farmers

### 7.3 More multiple benefits from flood management schemes

#### Scoping

- Identify benefits
- Reduction in flooding frequency and severity
- Public access routes
- Control of flood waters
- Legislation changes?

#### Creative ideas

- Go for water management, not flood specific management
- Build flood risk management into other projects
- Balance pond habitat development
- Compensation for landowners re deliberate flooding
- Explore local funding opportunities

#### Stakeholders

- EA, County Councils, IDBs, landowners, businesses, residents, district and parish councils, conservation groups, recreational users, established action groups (ADA, ABI, Upper Thurne)

#### Next Steps

**Key issue area driver:** Graham Brown (NCC)

**Key next task:** Strengthen group collaboration

#### Other next steps

- Change legislation - for funding, SUDS
- Renew statement of principles
- Identify and engage communities (at risk groups)

Name	org	commitment
Barry Bendall	RT	Happy to help share practice from other catchments
Giles Bloomfield	BIDB	Working on many water level managements plans delivery schemes within Norfolk with multi-benefit solutions
Jeremy	EA	Flood risk management

Bloomfield		
Graham Brown	NCC	Local flood risk manager involved in local flood risk schemes, reducing flood risk in Norfolk
Kevin East	CE	Canoe England would wish to be informed of physical changes to waterways. Able to advice on recreation facilities and gains from FM schemes
Steven Falk	Buglife	Buglife can provide information and advice on a wide range of insect and invertebrate issues (including key habitats)
Tony Goodwin	BIDB	Flood risk, water management and engineering expertise
John Hiskett	NWT	NWT initial contact on this issue
Rob Sanderson	EA	Link to EA FRM schemes and potential improvements
Tim Strudwick	RSPB	Opportunities to create and restore habitats for wildlife and people
David Thomas	IDB	Link to IDB operation
Henry Walker	FC	Happy to give advice to landowners and farmers on habitat and wetland creation
Russell Wilson	BA	Promoting access and recreational benefits from flood management schemes

## 7.4 **Growth and development leading to reduction in water quantity and quality?**

### **Scoping**

- Infrastructure on new developments - recognising the water environment is key
- Economic models - who pays?
- Must be willing to move from historical behaviour
- Reform - being open to change
- How is growth and water resourcing planned? Are houses going where the capacity is?

### **Creative ideas**

- Alternative ways to treat water/sewage/make water available
- Alternative way to permit/regulate/manage
- Local level ownership of water availability
- Licensed aggregates to allow flexibility within a catchment (abstraction)
- Provide knowledge to the local environment and site suitability for growth/development
- Take knowledge from those with previous experience ie other countries
- Local Population control - more education on population growth
- Education, practise for householders/industry on how to reduce loading to sewers

- Stakeholders working together to discuss/decide responses on planning applications
- Stakeholders
- Research innovators, agriculture, planners and developers, water companies, regulators, leaders within communities, industry, environment/wildlife, recreation, tourism

#### Next steps

**Key issue area drivers:** Rachel Rees (EA) and Mark Andrews (EA)

**Key next step:** Using Long Stratton development proposals, initiate a collective workshop that enables a range of specialists/ interests to openly explore traditional and innovative solutions. Enables information sharing and forward looking approaches. Rachel and mark will seek to bring this about as part of a catchment approach.

#### Other next steps

- Be willing to accept risks
- Trials and pilots
- Promoting best practise
- Fully implement current practises/arrangements ie SUDS, water harvesting
- Communication between stakeholders - where restraints are to eliminate unrealistic expectations
- Promote sharing of information

Name	Org	commitment
Mark Andrews	EA	My role means I can influence in the EA and work with planners and water companies at strategic level
Alex Collins	ICL	Desk studies and academic input
John Hiskett	NWT	Would like to have a better knowledge of likely impacts of growth on Broads water quality in order to comment on plans
Simon Hooton	BA	Try to use BAs 'cutting edge' culture to support and/or stimulate new approaches (in partnership) talk to John Clements
Victoria Lemmon	AW	I deal with water quality from sewage treatment works which receive increase flow due to growth
Bridget Marr	EA	Knowledge of regulation of WQ and WR, sewage treatment options, river quality issues
Rachel Rees	EA	Water quality planner involved in asset planning, commenting on strategic growth options etc

## 7.5 Heavily modified rivers

### Scoping



- Not only WFD definition
- Habitat protection/improvement
- Land drainage, tidal rivers
- Move from single purpose to multi-functional (channels and management)
- Flow management, hydro, water levels

#### **Creative ideas**

- Re-naturalisation of channel set back/rond creation
- New approaches to flood defence eg water storage, links to flood defence, public water supply
- Recirculate water to reflow down river
- Hydro-power viability?
- Saltmarsh creation
- Ditch improvement
- Creative water transfer - TAs into Wensum?

#### **Stakeholders**

- Mill owners
- Wildlife interests, planning authorities, landowners, graziers, anglers, boaters, statutory stakeholders, parish councils

#### **Next steps**

**Key issue area driver:** Dan Hoare (BA)

**Key next step:** Erosion Protection Project incorporating habitat creation - set up a focused task and finish group

#### **Other next steps:**

- Ensure resource to reflect/pay for ecosystem services
- Assessment and prioritisation of works
- Communication, engagement, consultation
- Landscape wide action plans
- Identify/share case studies including economic case
- Cost benefit analysis
- Mechanisms for delivery
- Building capability in partners/third sector (delivery)
- WDF compliant

<b>Name</b>	<b>Org</b>	<b>Commitment</b>
Kevin Allen	AT	
Giles Bloomfield	BIDB	WFD IDB - lead; WLMP project manager for IDB; delivery schemes in partnership within Norfolk
Dave Brady	NT	River naturalisation, large body debris, sediment trapping
John Currie	BASG	Fishing interest. Consult with governing bodies to improve and alleviate and improve situation
Geoff Doggett	WRT	Working on heavily engineered River Waveney - sluices, mills, redundant structures and bridges;

		heritage to engage public; Offer voluntary effort on RW
Kevin East	CE	In river structures canoe England can advise on combined fish/ canoe passes and portable arrangements Comment: changes to HM rivers should not make the waterway unusable by canoes ie lowering water levels
Steven Falk	Buglife	Buglife can offer advice on river restoration and management for invertebrates including protected species like white clawed crayfish, anisus snail etc
Victoria Fradley	NE	Catchment sensitive farming providing on farm advice often co-ordinating groups and funding to improve watercourses
Tony Goodwin	BIDB	Assist in water management, engineering and economic advice
Dan Hoare	BA	I have responsibility for management of schemes impacting wildlife and modification of Broads rivers!
Simon Hooton	BA	Happy to help with strategic aspects if needed
Steve Lane	EA	Experience in planning and delivery of rehab schemes, background in fisheries ecology; links to wider fisheries stakeholders. Case studies and data
Bridgett Marr	EA	Interested in helping to address issues to meet WFD - may have funds available!
Andrew Raine	EA	Biological surveys, data, advice
Dave Shearing	BASG	Knowledge of good fish habitat
Henry Walker	FC	Many landowner contacts to facilitate catchment-wide initiatives

## **7.6 Rural septic tanks not as good as they should be**

### **Scoping**

- Where are they?
- Priority areas?
- Understanding the impact - what is the science?
- Who need to be involved? Who is interested?
- Contaminants, status, maintenance, receiving water

### **Creative ideas**

- Information to installers - agreed guidance
- Free inspection (independent broker) incentivised
- Reduced usage - grey water re-use
- First time rural sewage schemes
- Local evidence (rivers/lake) and education/advice

- Incentives to improve scrappage schemes and friendly chemicals
- Walk over surveys to identify problems
- Village champions

#### Stakeholders

- IDB, parish councils, county/local authorities, WASC water companies, Conservation groups, EA, local population/homeowners, farmer/landowner, installers/maintainers

#### Next Steps

**Key issue area driver:** Geoff Doggett (Waveney River Trust)

**Key next step:** Put on agenda for WQP; Collate ongoing work; Identify quick wins – link DWP project with WRT project

#### Other next steps

- Quick wins – failing PO4 areas – quick projects eg Mendlesham
- Link to land drainage
- Collate existing information – the 'as is'
- Use scope to prioritise local project. Use local knowledge to aid delivery

Name	Org	Commitment
Tim Blackmore	AW	Mapping of priority areas
Mike Davison	BES	More support
Geoff Doggett	WRT	Can mobilise RWT membership volunteers for Waveney
Rob Holland	ESW	We have surveyed and mapped septic tanks around Trinity Broads and Lound lakes
Andrea Kelly	BA	Manage research project to understand impact of septic tanks 2012 – 2015 (BA and NE)
Andrew Lovett	UEA	I can help with GIS mapping of areas on septic tanks and proximity to water bodies
Bridget Marr	EA	Knowledge of pollution impacts, options for improvement, links to existing projects
Rachel Rees	EA	Can help with datasets of where septic tanks are, and the contribution they may be having on water quality in rivers (modelling). There are already pilots/etc across the region – I can link in to these!
Rory Sanderson	EA	Pilot project potential
David Thomas	IDB	Responsible for IDB operations

Participants also had the opportunity to add comments and commitments to the other key issue areas, as follows:

## **7. Development of a Broadland economic model for ecosystem services**

<b>Name</b>	<b>Org</b>	<b>Comment/commitment</b>
Simon Hooton	BA	Still interested in this and would like to explore it (with others?) for the Broads
Henry Walker	FC	Interested in developing economic model for ecosystem services in Broadland catchment

## **8. Research into prymnesium (toxic algae) and impacts on ecosystem and fisheries and economy**

Steve Lance	Ea	Input/resources. Benefits of research and development
John Currie	BASG	Prymnesium needs to be recognised as a major threat to the Broads comparable to floods and saline incursions
Andrew Raine	EA	Team members working on impacts of prymnesium
Louise Taylor	EA	Broads liaison officer trying to collate all prymnesium information

## **9. Non native species risk to reduction of biodiversity**

Tim Strudwick	RSPB	RSPB site manager, Yare Valley - interested in coordinated approach and monitoring and control
Kevin east	CE	Canoe England can assist in promoting awareness
Dan Hoare	BA	Invasive species control programme
Andrew Raine	EA	Killer shrimp monitoring, biosecurity advice
Louise Taylor	EA	Broads liaison officer - killer shrimp monitoring, monitoring plant communities

## **10. Not enough water in the catchment. We need to find ways of sharing it**

Andrea Kelly	BA	Happy to facilitate further discussion in the Water Quality partnership or task and finish group- any other interest?
Simon Hooton	BA	Yes Andrea!

## **11 - Enabling people to understand more about their local water environment**

Rob Holland	ESW	
Simon Hooton	BA	Push water forward as BA emphasis for campaign over some years . Capture people's imagination and volunteering
Andrea Kelly	Ba	Next world wetland day. Broads Biodiversity Conference. Topic is value of water. Kit will have

		large media coverage
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## 8. Next steps from today

The following actions were agreed during the final workshop session:

- EA information sharing portal available for integrated catchment management issues/ Jeremy Bloomfield to co-ordinate
- Bridgett Marr (EA) to make catchment maps displayed available to all
- Peter Woodward to produce full outcomes report for circulation to this group. Possible summary report for wider circulation (impetus group to consider)
- 'Impetus group' to consider press release to indicate momentum - need to do more flag waving on catchment management
- Simon Hooton (BA) to reconvene Task/finish workshop reflection/impetus group = 'Impetus Group'. Existing members from EA, BA, NE , E&SW plus Barry Bendall (Rivers Trust), and a landowner/farmer view (with Henry Walker (FC), Alex Dinsdale (NFU), Rob Wise (CLA) to facilitate that). Consider outcomes and next steps. Also consider best mechanism to ensure
- strategic approach to build momentum
- consider resource for an integrated catchment management facilitator/champion (BA+ EA happy to work on with ideally support from others, Water companies?)
- plan a positive future - and ensure good co-ordination

Finally, participants were invited highlight one particular personal action they would take forward as a contribution to take forward the catchment agenda management, as follows:

Name	org	Actions I will take
Barry Bendall	RT	Help share best practice etc from other catchment initiatives
Giles Bloomfield	BIDB	Communicate with FRM partners regarding pending schemes to ensure multi-benefit solutions are at the very least discussed before scheme is fully developed. Looking for new partners
Jeremy Bloomfield	EA	Involvement in taking forward a more uniformed approach to providing information to the farming and landowning community
John Currie	BASG	I would contribute and be committed to any project to idea to help alleviate the danger of Prymnesium
Nick Deane	NFU	Helping with fragmented agri-advice

Alex Dinsdale	NFU	I will explore how the Norfolk Committee of the campaign for the Farmed Environment Can contribute to achieving Task/Priority 1 - fragmented agri-advice
Geoff Doggett	RWT	Communicate key messages to our 300 members to continue to act as a champion
Tony Goodwin	BIDB	Assist Broads Authority in erosion protection and habitat creation scheme - a practical trial!
Bernard Harris	GYBS	Coastal, SMP, SWMP
Simon Hooton	BA	Make sure the 'impetus group' is inclusive and makes a difference to the catchment
Andrea Kelly	BA	Coordinate some of the research evidence Help recruit new catchment officer
Victoria Lemmon	AW	I will discuss today with those in my wider team and will see how Anglian water can continue to support a sustainable Broadlands
Bridget Marr	EA	Ensure momentum maintained Get involved in groups for delivering actions
Will Robinson	ESW	I commit to sitting in the agro-advice task and finish group
Nigel Simpson	NE	Happy to help sort fragmented agri-advice
Louise Taylor	EA	Helping to push forward how to address integrated sediment management - tackle at source - we already have plans!
David Thomas	IDB	Input to group 6
Henry Walker	FC	Get Rivers Trust and catchment approach into Farm Conservation agenda
Russell Wilson	BA	Meet with other agencies to discuss sediment management going forward

**End**

Peter Woodward  
Quest Associates  
September 2012