

# Welcome

Broads Engage

Biodiversity & Water theme







# Welcome

## Broads Engage

### Biodiversity & Water theme

### Introduction Simon Hooton

# Agenda

Presentation: Assets and pressures	Andrea Kelly
Presentation: Framework for action	Karen Kramer-Wilson
<b>Group discussion - pressures</b>	
<b>Tea break (14:45)</b>	
Presentation: Taking action, our proposals	Andrea Kelly
<b>Group discussion - actions</b>	
Sum up (16:30)	Rory Sanderson



# Broads Engage

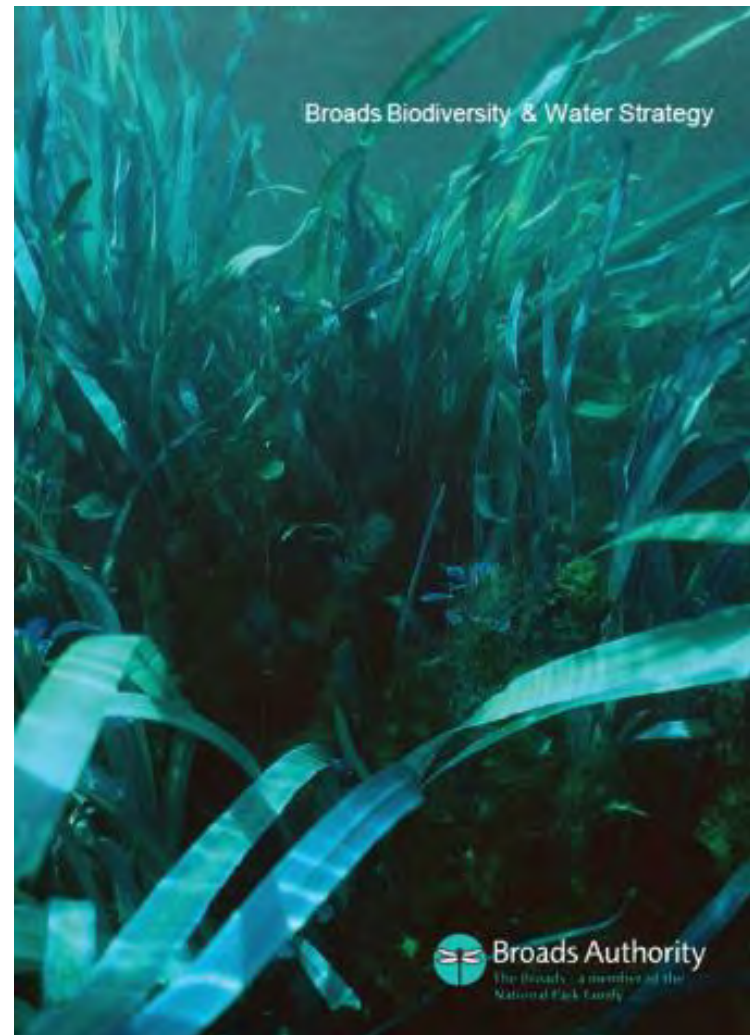
Assets and Pressures

Biodiversity & Water theme

Andrea Kelly

# Broads Biodiversity and Water (2013)

**The Broads Plan (2017)** identifies a need to protect and enhance biodiversity and the water environment, including at the catchment scale.





# Builds on other relevant strategies

- Integrated Access Strategy (2013)
- Broads Tourism Strategy (2016)
- Broads Education Strategy (2017)
- Broads Volunteer Strategy (2017)
- Broads Climate Change Adaptation Plan (2016)



A Green Future: Our 25 Year Plan to  
Improve the Environment



# Evidence base

- Biodiversity Audit (2011)
- Lake Review (2015)
- Species trends & data  
(birds, vegetation, hydrology)
- Active research

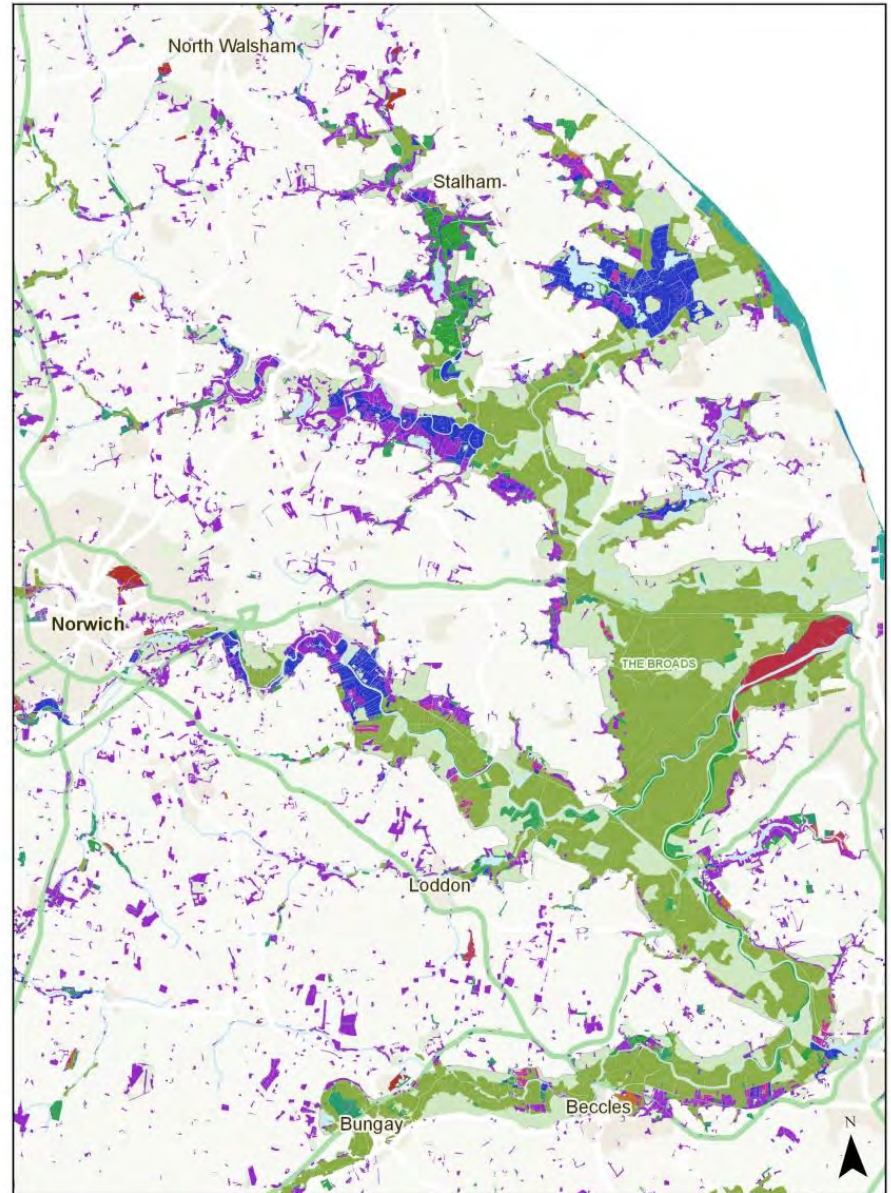
October 2011

Biodiversity Audit and Tolerance Sensitivity Mapping  
for the Broads



# Main habitats

1. Fen
2. Grazing marsh and ditches
3. Wet woodland
4. Estuary
5. Rivers and broads
6. Heath and sand dune





# Biodiversity Audit

## Bure long legged fly



- 11,067 species
- 1,519 priority species
- 66 regional specialists

# Pressures remain similar

Climate, sea level

Water quality  
and quantity

Land  
management

Invasive species

Development

Visitor numbers

**Brexit**

Local economy

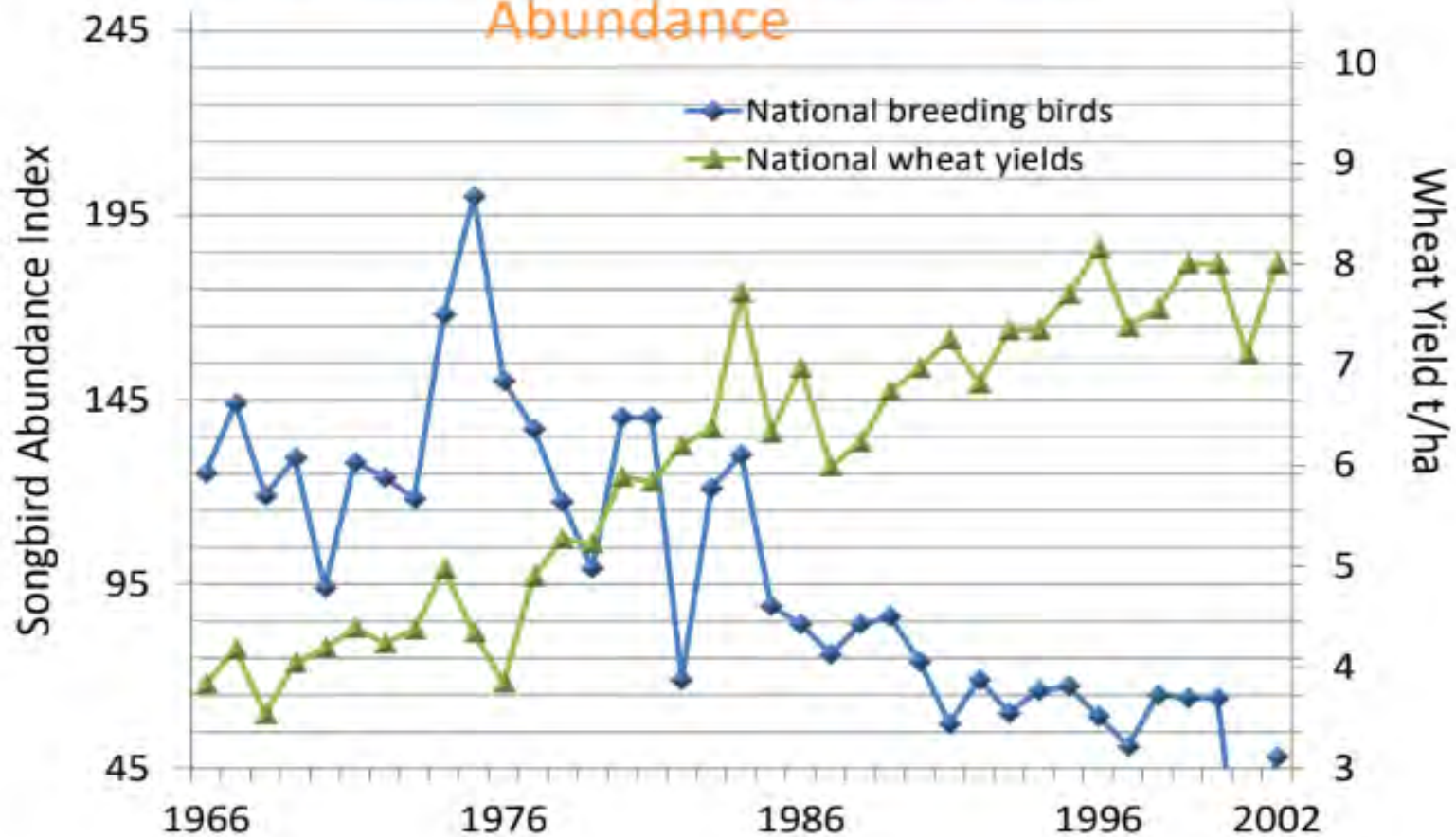
Urbanisation  
disconnect with  
nature

Knowledge and  
dedicated  
funding resource



# Pressures

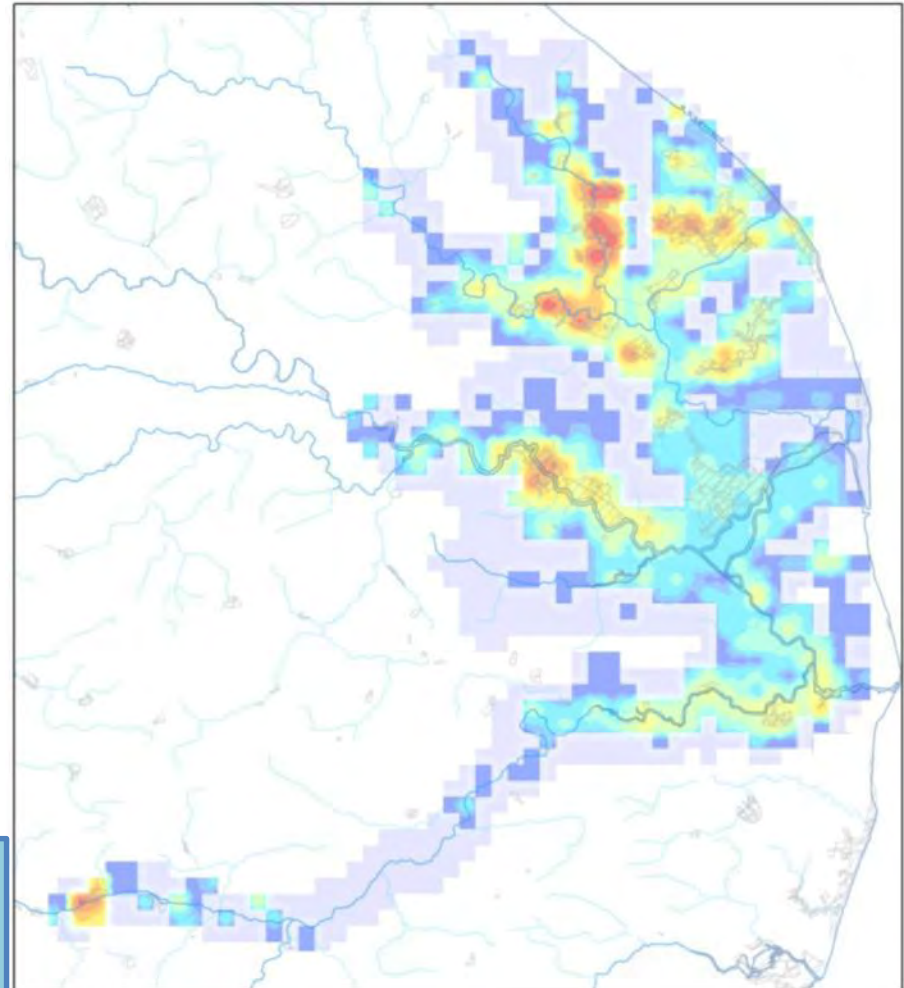
## UK Wheat Production Vs Songbird Abundance



# Climate change & sea level rise

Greater likelihood of flooding due to increasing occurrence and severity of weather events

63% of priority species (79% of regional specialities) can't cope with brackish conditions



Legend





# Climate warming

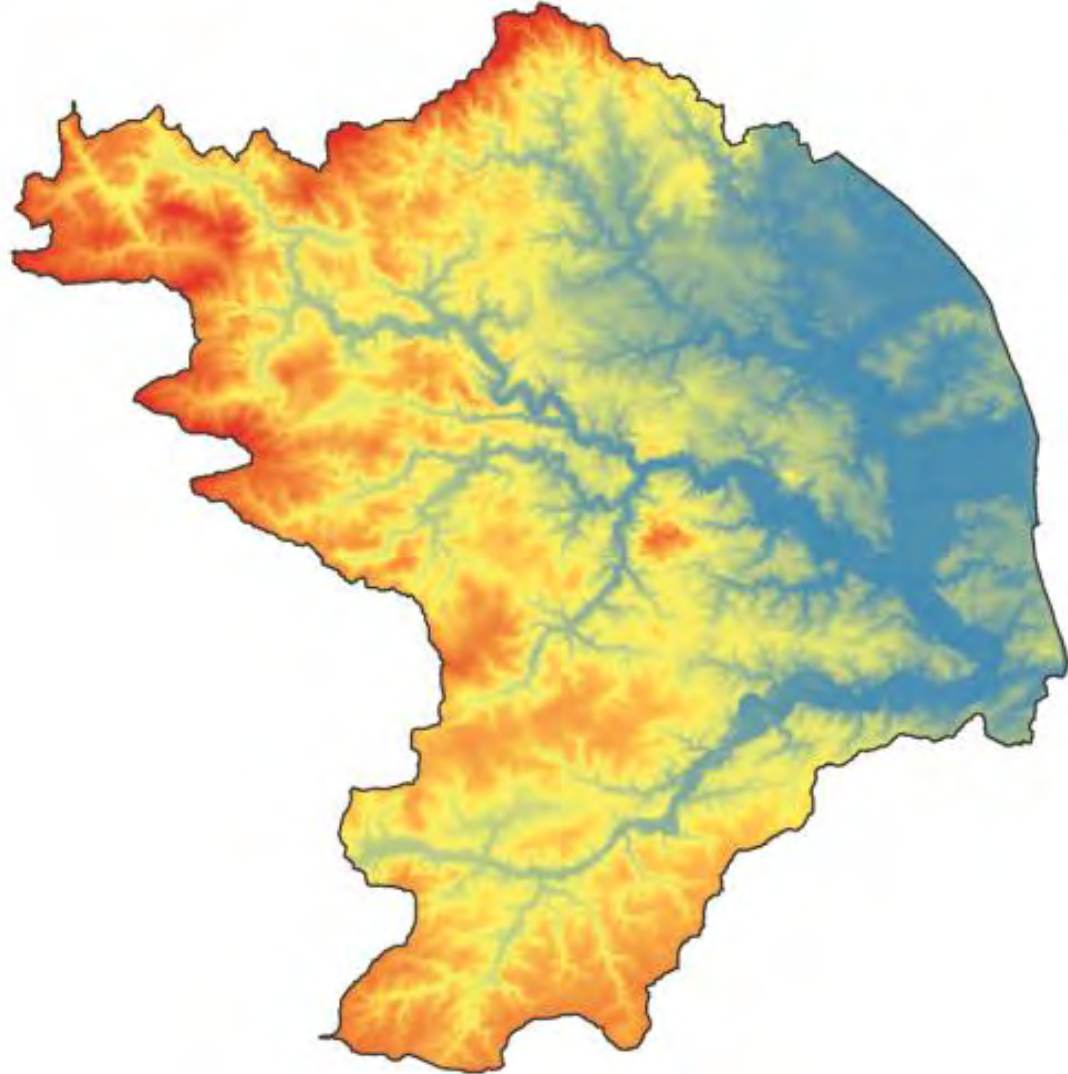
- Dry habitats resulting in species losses
- Stagnation and dissolved oxygen crashes with reduced freshwater flow and summer storms
- Increased risk of fires and damage to habitat and peatland resource
- Colonisation by species such as willow emerald damselfly and egrets
- Birds arriving over 20 days earlier than they did in the 60s



© Jeff Hazell

# Water quantity and quality

- Water abstraction
- Waste water & diffuse water pollution



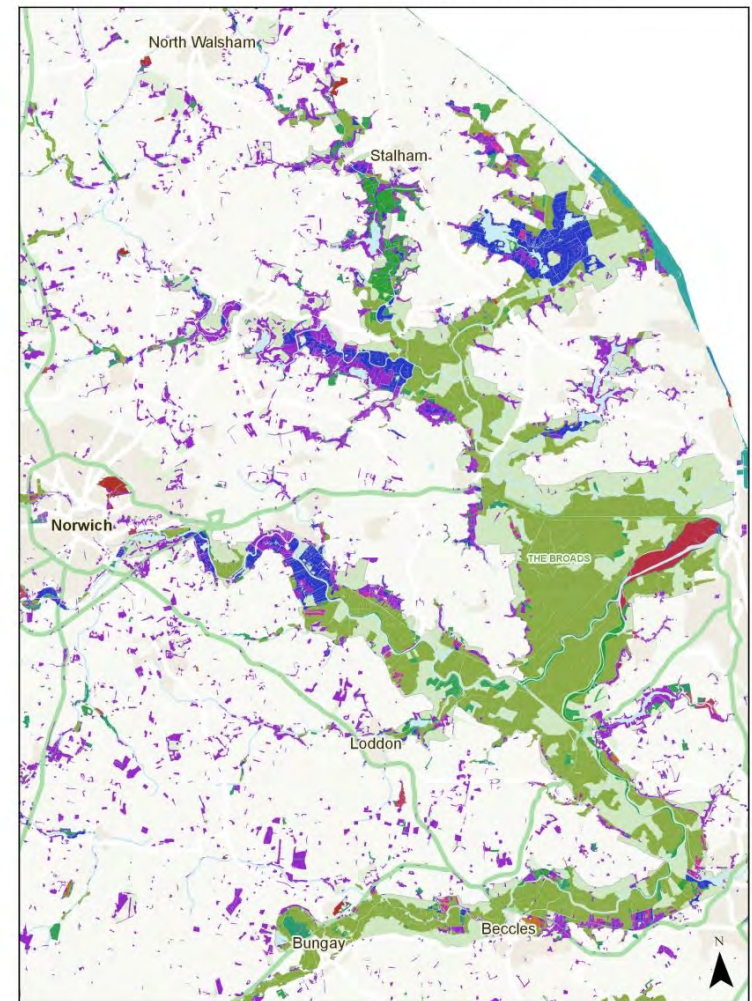


# Land management

## Examples:

- drainage results in land subsidence
- lack of scrub removal results in woodland development and loss of rare fen communities

Priority Habitat Inventory - Last modified 2015



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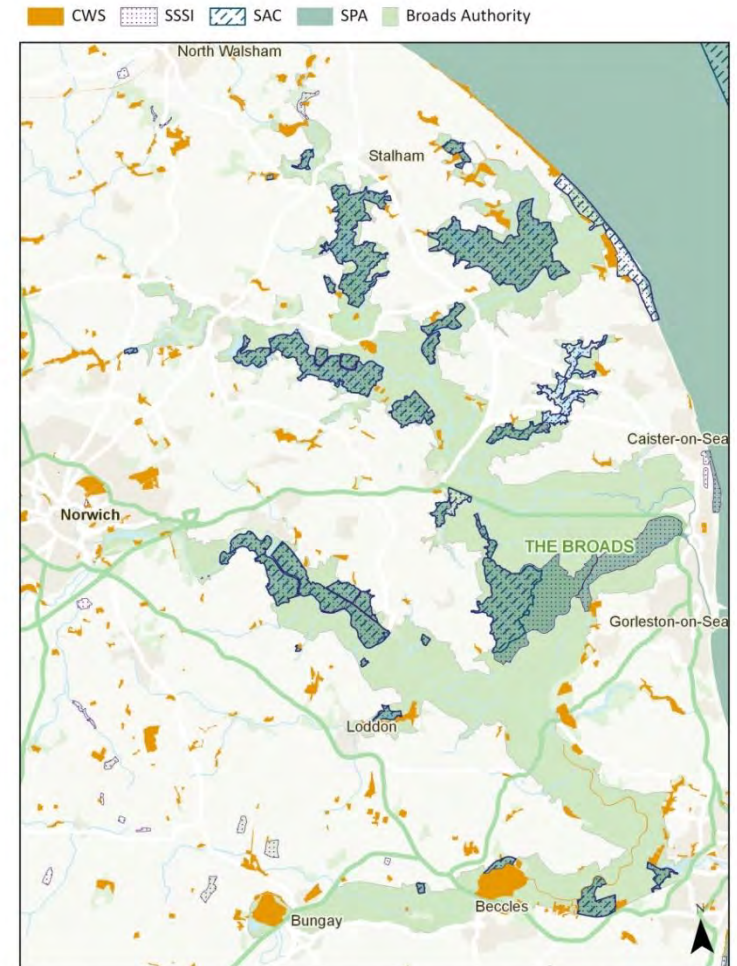




# Visitor numbers

- Direct disturbance to wildlife and habitats, such as breeding birds & trampling of sand dunes.
- Improved engagement with people about nature & local economy

Designations



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# Broads Engage

Framework for action

Biodiversity & Water theme

Karen Kramer-Wilson

# Natural England – Framework for Action

Karen Kramer Wilson

Broads Focus Area – Senior Team Lead



- The 'How' or 'Way' we work in the Broads
- NE's Guiding Principles and Policy that support successful approaches for tackling pressures
- Roles, Resources, Responsibilities specific to NE
- Ambitions and Intentions moving forward

# Broads Landscape

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# Collaboration is Key





# Broads Partnership Landscape



- There are many organisations working in the Broads
- They all have different boundaries, roles, resources, responsibilities, duties, which makes it complex
- Working through the Broads Biodiversity Partnership and Broadland Catchment Partnership helps set shared objectives and develop projects together



## NE's role under **Natural Environment and Rural Communities Act 2006** NERC

Natural England's general purpose is to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development

- Promoting nature conservation and protecting biodiversity
- Conserving and enhancing the landscape
- Securing the provision and improvement of facilities for the study, understanding and enjoyment of the natural environment,

## NE's role under **Natural Environment and Rural Communities Act 2006** NERC

- Promoting access to the countryside and open spaces and encouraging open-air recreation
- Contributing in other ways to social and economic well-being through management of the natural environment
- May be carried out by working with local communities



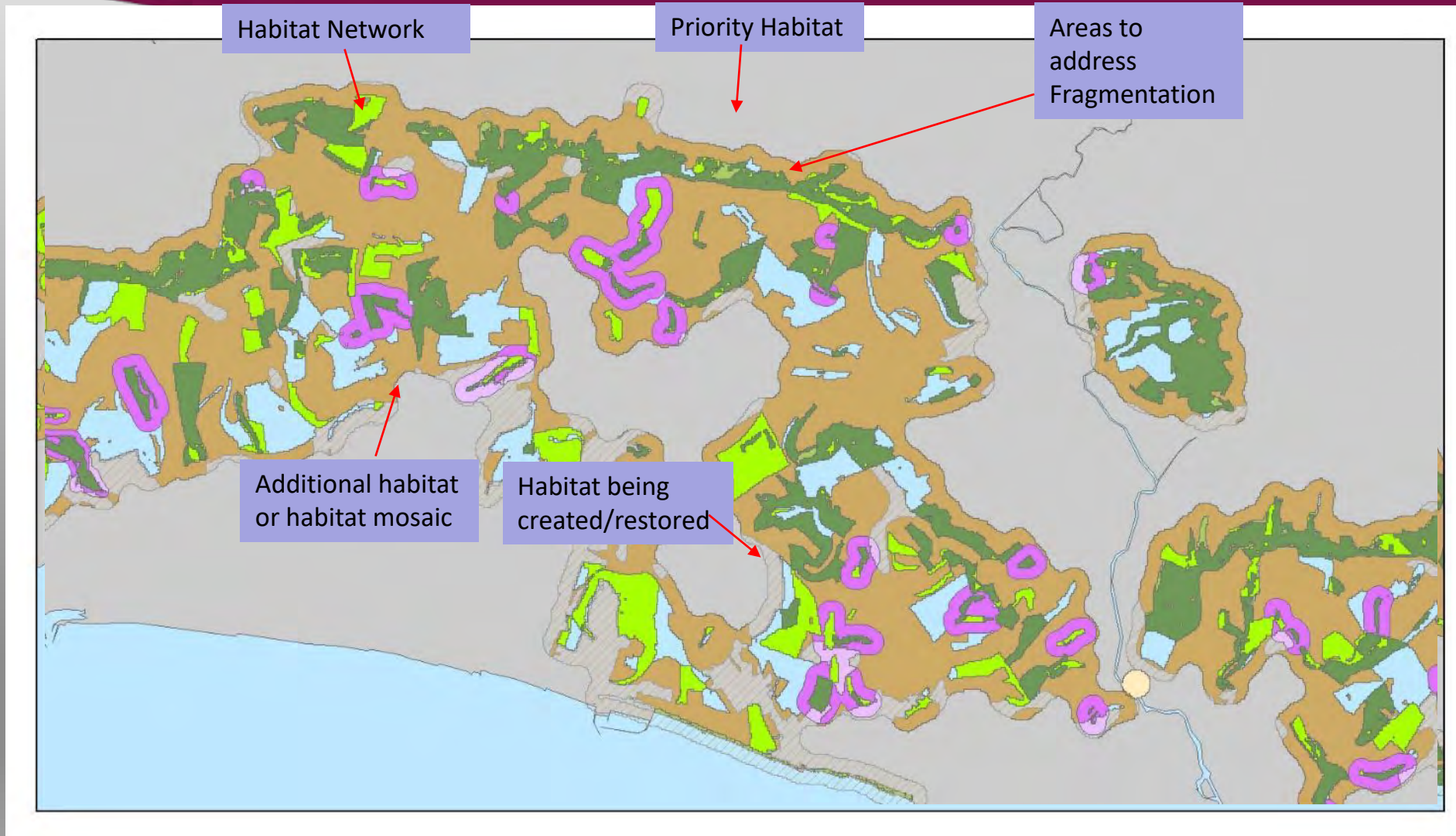
- Countryside Act 1968
- Water Framework Directive (WFD)
- Habitats Regulations - apply to a variety of situations where European Protected Sites such as Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) are likely to be affected
- SSSIs

# Natural England's Intentions and Ambitions Under the 25 Year Plan



- Everything we do will contribute to the ambitions and outcomes of the Government's 25 Year Environment Plan
- We are outlining a distinctive contribution NE will make to maximise the impact of local action to deliver the 25YEP
- Four cornerstones taken directly from the 25YEP frame our ambition
- Local Natural Capital Plans and Nature Recovery Networks are about local priority setting
- ELMS system and Net Gain are about new tools to deliver against those priorities

# Natural England's Intentions and Ambitions Under the 25 Year Plan







- Agri-Environmental Schemes
- Participation in shared projects – Heritage Lottery Funding
- Support of funded research projects
- Actively Explore Alternative Funding

# Current Avenues for Support by NE Broads Focus Area Team



- Catchment Sensitive Farming
- Agri-Environmental Schemes – existing
- National Nature Reserves
- Sites of Special Scientific Interest (SSSIs)
- Diffuse Water Pollution Planning – EA/NE collaborative approach
- National Field Unit – Specialist Services
- Sustainable Development Advice
- Externally Funded Projects – Hoveton – LIFE/HLF

# Opportunities to Engage and Collaborate

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## Feedback on Pressures

1. Is the list of pressures about right?
2. Is there anything missing from our identified pressures?



# Broads Engage

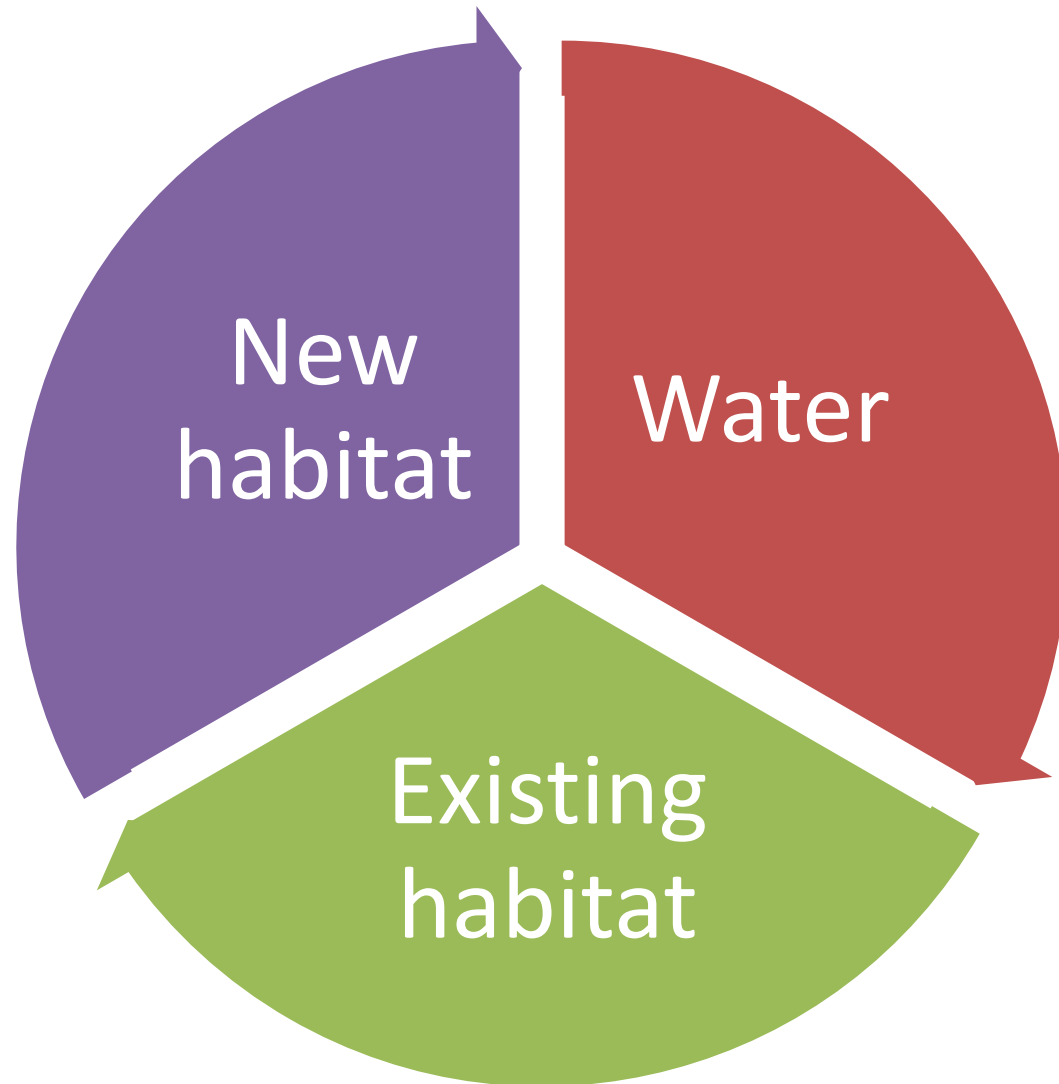
Taking action, our proposals

Biodiversity & Water theme

Andrea Kelly



# Action themes



1. Restoring, maintaining and enhancing water quality to **achieve 'good' ecological status/potential**

## a. Lake restoration

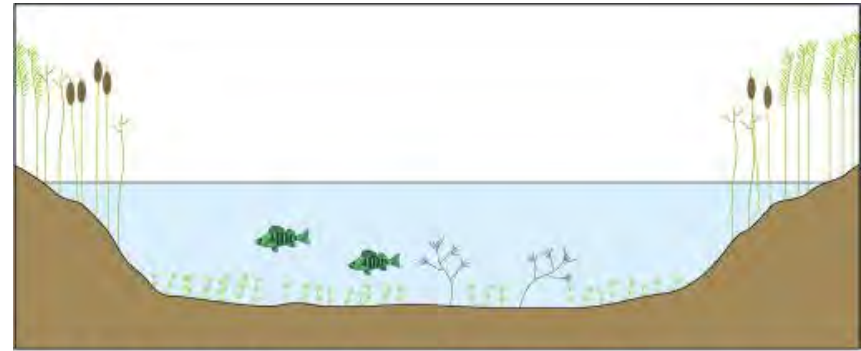
- PCLake predictive model
- Erosion protection & fishery enhancement
- Norwich River Wensum Strategy
- Whitlingham maintaining clear water
- Hickling lake restoration



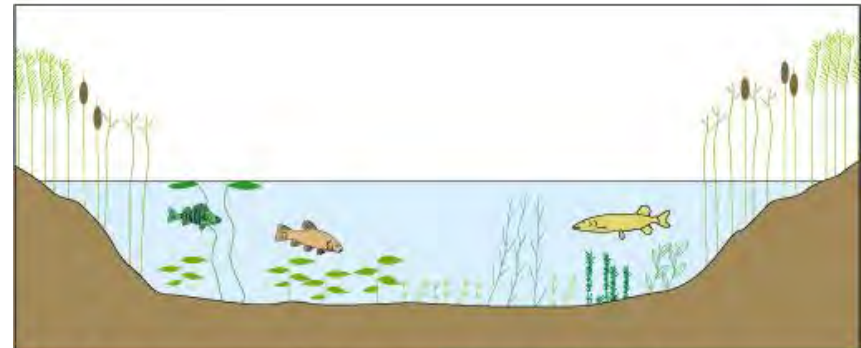




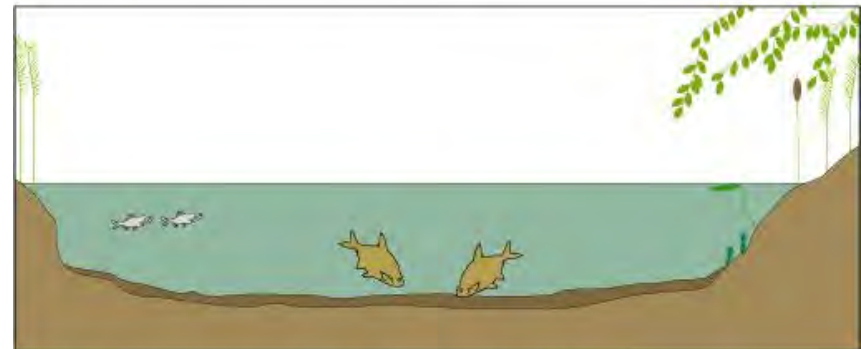
# Barton lake restoration



**Phase 1** - low nutrient, clear water, carpets of stoneworts and other pondweeds, mixed fish population



**Phase 2** - medium nutrient, clear water, mix of abundant submerged and floating vegetation, mixed fish population



**Phase 3** - high nutrient, murky water, few or no water plants, mainly small roach and bream

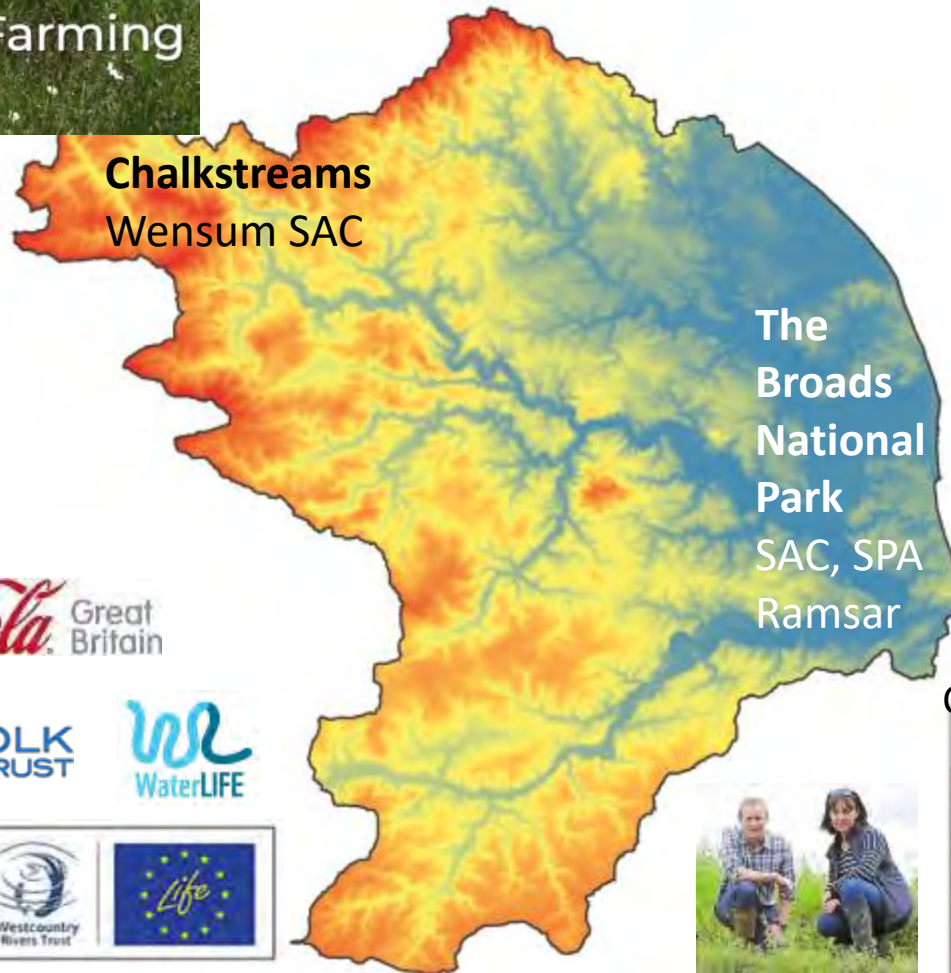
# 1. Restoring, maintaining and enhancing water quality to **achieve 'good' ecological status/potential**

## b. Reduce point and diffuse pollution

- Boat speed compliance checks
- Policy responses (e.g. water abstraction, agriculture)
- Litter picks
- Water Sensitive Farming







NORFOLK  
RIVERS TRUST



Communicating



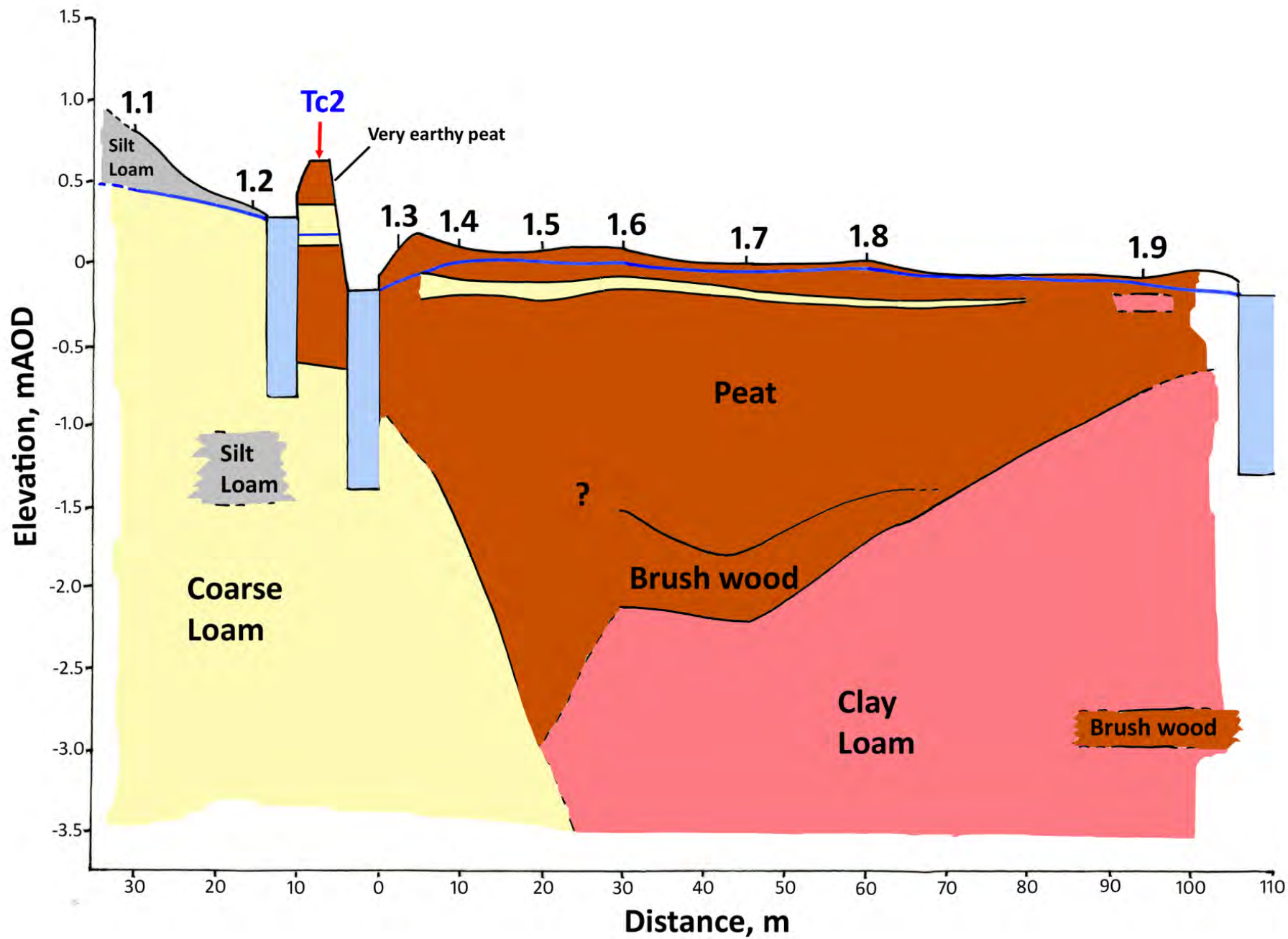


## 2. Managing existing fen, reed bed, wet grassland and wet woodland

### a. Maintain & enhance existing areas



- Supporting reed cutters
- Development of Environment Land Management Scheme (Defra)
- New wetland products, citizen science CANAPE (EU)
- Managing and restoring fen How Hill (WEG)



## 2. Managing existing fen, reed bed, wet grassland and wet woodland

### b. Priority species

- Monitor (e.g. swallowtail)
- Translocate (fen orchid, snail, fen raft spider)
- Swift tower
- Bats & owls



© Helen Smith





## 2. Managing existing fen, reed bed, wet grassland and wet woodland

### c. Invasive non-native species

- Mink Project
- Floating pennywort
- Biosecurity campaigns
- Biocontrol



**STOP THE SPREAD**

**STOP THE SPREAD**  
INVASIVE AQUATIC SPECIES  
CHECK-CLEAN-DRY

Are you unknowingly spreading invasive species on your water sports equipment and clothing?

Invasive species can affect fish and other wildlife, restrict navigation, clog up propellers and be costly to manage. You can help protect the water sports you love by following three simple steps when you leave the water.

**CHECK** Check your equipment and clothing for live organisms - particularly in areas that are damp or hard to inspect.

**CLEAN** Clean and wash all equipment, footwear and clothing thoroughly.  
If you do come across any organisms, leave them at the water body where you found them.

**DRY** Dry all equipment and clothing - some species can live for many days in moist conditions.  
Make sure you don't transfer water elsewhere.

For more information go to [www.invasivespeciesireland.com](http://www.invasivespeciesireland.com)









**Looking very large and very easy to spot**

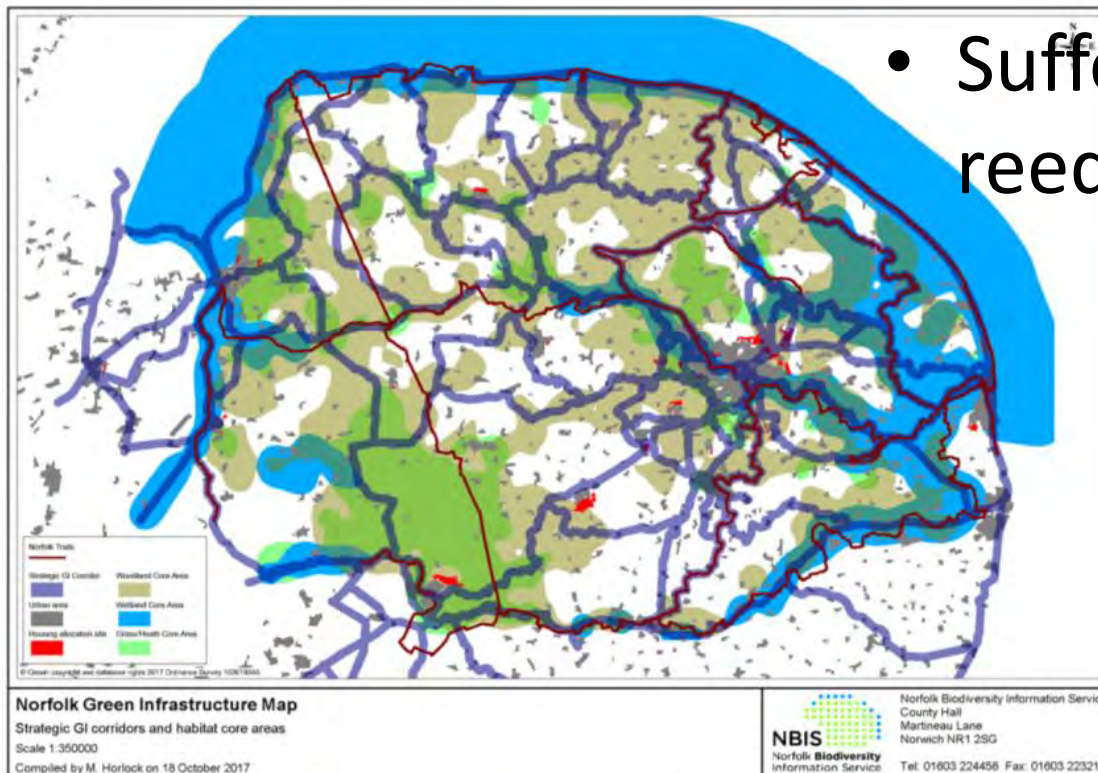




### 3. Extend & create new biodiverse areas, habitat networks and buffer zones within the Broads catchment

a. Create 'bigger, better and more joined up' areas

- Natural Capital Assessment
- Norfolk Bat Conservation Strategy
- Suffolk Broads creating reedbed with dredgings

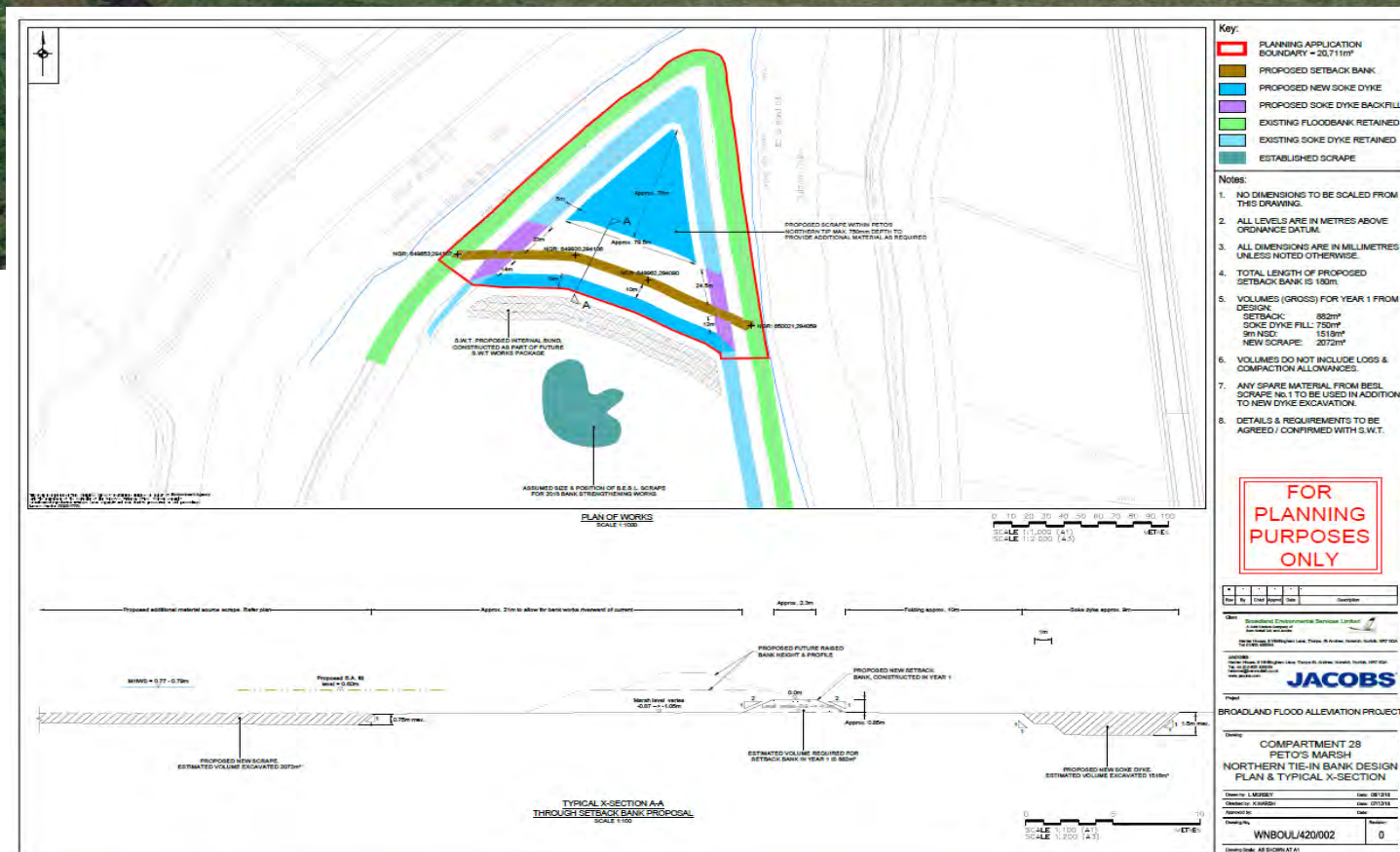


**NBIS**  
Norfolk Biodiversity  
Information Service

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# Petos Marsh Waveney





3. Extend & create new biodiverse areas, habitat networks and buffer zones within the Broads catchment

b. Improve partnership coordination and communication

- Broads Biodiversity Partnership & research workshops
- Wild Watch (camera loan)
- Walks and talks





# Helping facilitate and record **discussions....**

Christine Luxton – Suffolk Wildlife Trust

Karen Kramer-Wilson - Natural England

Sarah Burston - Norfolk County Council

Rory Sanderson - Environment Agency

Sid Cooper - Forestry Commission

Kate Warwick - Environment Agency

Joseph Kenworthy - Norfolk County Council

Jamie Manners Broads - IDB

## Group discussion about Actions

1. What are your thoughts about our actions?
2. Add your own actions?
3. How can we work together on our priorities?



# Thank you

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