Improvement Programme for England's Natura 2000 Sites (IPENS)

Planning for the Future

Site Improvement Plan

Broadland

Site Improvement Plans (SIPs) have been developed for each Natura 2000 site in England as part of the Improvement Programme for England's Natura 2000 sites (IPENS). Natura 2000 sites is the combined term for sites designated as Special Areas of Conservation (SAC) and Special Protected Areas (SPA). This work has been financially supported by LIFE, a financial instrument of the European Community.

The plan provides a high level overview of the issues (both current and predicted) affecting the condition of the Natura 2000 features on the site(s) and outlines the priority measures required to improve the condition of the features. It does not cover issues where remedial actions are already in place or ongoing management activities which are required for maintenance.

The SIP consists of three parts: a Summary table, which sets out the priority Issues and Measures; a detailed Actions table, which sets out who needs to do what, when and how much it is estimated to cost; and a set of tables containing contextual information and links.

Once this current programme ends, it is anticipated that Natural England and others, working with landowners and managers, will all play a role in delivering the priority measures to improve the condition of the features on these sites.

The SIPs are based on Natural England's current evidence and knowledge. The SIPs are not legal documents, they are live documents that will be updated to reflect changes in our evidence/knowledge and as actions get underway. The information in the SIPs will be used to update England's contribution to the UK's Prioritised Action Framework (PAF).

The SIPs are not formal consultation documents, but if you have any comments about the SIP or would like more information please email us at IPENSLIFEProject@naturalengland.org.uk, or contact Natural England's Responsible Officer for the site via our enquiry service 0300 060 3900, or enquiries@naturalengland.org.uk

This Site Improvement Plan covers the following Natura 2000 site(s)

UK9009253 Broadland SPA

UK0013577 The Broads SAC

Site description

The fens of the Broads contain a diverse mix of species making it one of the most extensive remaining areas of fen habitat in Europe, being internationally recognised for eight fen communities. The fens and drained marshes are dissected by networks of dykes that support internationally important aquatic plant communities that have been lost from many broads: the fen habitats are also used by the internationally important otter.

The Broads also represent the largest area of floating forest and wet woodland in Britain and possibly Western Europe. Carr woodland supports four nationally important plant species and the limited area of mature alder carr is considered of priority international importance. In addition, parts of the Broads support a nationally rare scrub type that is almost entirely confined to East Anglia.

Fen habitats offer foraging and nesting sites for populations of three internationally important bird species; marsh harrier, bittern and crane. Nationally important populations of pochard and shoveler breed on unreclaimed fens and drained marshes adjacent to open water. Cetti's warbler, Savi's warbler and the bearded reedling are further species present in nationally important breeding numbers. Internationally important populations of shoveler overwinter in unreclaimed fens and marshes.

The Broads is a complex site and there are a range of issues impacting across the catchment or in specific parts of the catchment. In many cases there are interactions between issues. This SIP links with actions in key documents, such as the Broads Plan and the Broadland Rivers Catchment Plan. Twenty-eight Sites of Special Scientific Interest (SSSI) have been notified in the Broads, with most of these sites being of international importance for their habitats and/or bird populations or species and have been included within the European Directives as the Broads Special Area of Conservation and the Broadland Special Protection Area.

Plan Summary

This table shows the prioritised issues for the site(s), the features they affect, the proposed measures to address the issues and the delivery bodies whose involvement is required to deliver the measures. The list of delivery bodies will include those who have agreed to the actions as well as those where discussions over their role in delivering the actions is on-going.

Priority & Issue	Pressure or Threat	Feature(s) affected	Measure	Delivery Bodies
1 Water Pollution	Threat	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H91E0 Alder woodland on floodplains, S1016 Desmoulin`s whorl snail, S1355 Otter	Reduce diffuse pollution	Anglian Water Services Ltd, Environment Agency, Great Yarmouth Borough Council, Internal Drainage Board(s) (IDB), Natural England, Norfolk County Council, North Norfolk District Council, South Norfolk District Council, Suffolk County Council, The Broads Authority, Waveney District Council, Broadland Rivers Catchment Partnership

2 Water Pollution	Threat	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, H6410 Purple moor-grass meadows, H7140 Very wet mires often identified by an unstable `quaking` surface, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H91E0 Alder woodland on floodplains, S1016 Desmoulin`s whorl snail, S1355 Otter	Explore potential measures to adress saline incursion	Environment Agency, Natural England, The Broads Authority
3 Water Pollution	Threat	A021(NB) Bittern, A037(NB) Bewick's swan, A038(NB) Whooper swan, A050(NB) Wigeon, A051(NB) Gadwall, A056(NB) Shoveler, A081(B) Marsh harrier, A082(NB) Hen harrier, A151(NB) Ruff, H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, H6410 Purple moor-grass meadows, H7140 Very wet mires often identified by an unstable `quaking` surface, H7230 Calcium-rich springwater-fed fens, H91E0 Alder woodland on floodplains, S1016 Desmoulin`s whorl snail, S1355 Otter, S1903 Fen orchid, S4056 Little ramshorn whirlpool snail	Further reduce pollutants entering the Broads from points sources	Anglian Water Services Ltd, Environment Agency, The Broads Authority
4 Climate change	Threat	A021(NB) Bittern, A037(NB) Bewick's swan, A038(NB) Whooper swan, A050(NB) Wigeon, A051(NB) Gadwall, A056(NB) Shoveler, A081(B) Marsh harrier, A082(NB) Hen harrier, A151(NB) Ruff, H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, H6410 Purple moor-grass meadows, H7140 Very wet mires often identified by an unstable `quaking` surface, H7230 Calcium-rich springwater-fed fens, H91E0 Alder woodland on floodplains, S1016 Desmoulin`s whorl snail, S1355 Otter, S1903 Fen orchid, S4056 Little ramshorn whirlpool snail	Develop an adaptation strategy	Natural England

5 Invasive species	Pressure	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, H6410 Purple moor-grass meadows, H7140 Very wet mires often identified by an unstable `quaking` surface, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7230 Calcium-rich springwater-fed fens, H91E0 Alder woodland on floodplains, S1016 Desmoulin`s whorl snail, S1355 Otter, S1903 Fen orchid, S4056 Little ramshorn whirlpool snail	Control invasive species	Environment Agency, Internal Drainage Board(s) (IDB), Natural England, Norfolk County Council, Norfolk Wildlife Trust, RSPB, Suffolk Wildlife Trust, The Broads Authority
6 Siltation	Pressure	A037(NB) Bewick's swan, A040(NB) Pink-footed goose, A051(NB) Gadwall, A056(NB) Shoveler, H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, S1355 Otter	Implement lake restoration plans	Environment Agency, Essex And Suffolk Water, Natural England, Norfolk Wildlife Trust, Suffolk Wildlife Trust, The Broads Authority
7 Inappropriate water levels	Pressure	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, H6410 Purple moor-grass meadows, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H91E0 Alder woodland on floodplains, S1355 Otter	Review and implement the Water Level Management Plan	Broads IDB, Environment Agency, Natural England, The Broads Authority
8 Inappropriate water levels	Pressure	H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, S1355 Otter	Put in place appropriate water level management	Broads IDB, Environment Agency, Natural England, The Broads Authority
9 Hydrological changes	Pressure/ Threat	A021(NB) Bittern, A037(NB) Bewick's swan, A038(NB) Whooper swan, A050(NB) Wigeon, A051(NB) Gadwall, A056(NB) Shoveler, A081(B) Marsh harrier, A082(NB) Hen harrier, A151(NB) Ruff, H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, H6410 Purple moor-grass meadows, H7140 Very wet mires often identified by an unstable `quaking` surface, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7230 Calcium-rich springwater-fed fens, H91E0 Alder woodland on floodplains, S1016 Desmoulin`s whorl snail, S1355 Otter, S1903 Fen orchid, S4056 Little ramshorn whirlpool snail	Investigate and mitigate the impacts of climate change	Environment Agency, Natural England, The Broads Authority

10 Water abstraction	Pressure	H7140 Very wet mires often identified by an unstable `quaking` surface, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), S1016 Desmoulin`s whorl snail, S1355 Otter, S1903 Fen orchid	Investigate and restore sustainable abstraction	Environment Agency, Essex And Suffolk Water, Natural England
11 Change in land management	Pressure/ Threat	A021(B) Bittern, A037(NB) Bewick's swan, A038(NB) Whooper swan, A050(NB) Wigeon, A051(NB) Gadwall, A056(NB) Shoveler, A081(B) Marsh harrier, A082(NB) Hen harrier, A151(NB) Ruff, H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, H6410 Purple moor-grass meadows, H7140 Very wet mires often identified by an unstable `quaking` surface, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7230 Calcium-rich springwater-fed fens, H91E0 Alder woodland on floodplains, S1016 Desmoulin`s whorl snail, S1355 Otter, S1903 Fen orchid, S4056 Little ramshorn whirlpool snail	Ensure favourable land management through agri-environment agreements	Environment Agency, Great Yarmouth Borough Council, Internal Drainage Board(s) (IDB), Natural England, North Norfolk District Council, South Norfolk District Council, The Broads Authority, Waveney District Council
12 Inappropriate ditch management	Threat	A021(B) Bittern, A037(NB) Bewick's swan, A038(NB) Whooper swan, A050(NB) Wigeon, A051(NB) Gadwall, A056(NB) Shoveler, A081(B) Marsh harrier, A082(NB) Hen harrier, A151(NB) Ruff, H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, H6410 Purple moor-grass meadows, H7140 Very wet mires often identified by an unstable `quaking` surface, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7230 Calcium-rich springwater-fed fens, H91E0 Alder woodland on floodplains, S1016 Desmoulin`s whorl snail, S1355 Otter, S1903 Fen orchid, S4056 Little ramshorn whirlpool snail	Implement the findings of the recent catch dyke project	Broads IDB, The Broads Authority
13 Inappropriate scrub control	Pressure	H6410 Purple moor-grass meadows, H7140 Very wet mires often identified by an unstable `quaking` surface, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7230 Calcium-rich springwater-fed fens, S1903 Fen orchid	Develop and implement a programme of scrub control	Natural England, The Broads Authority, Voluntary conservation organisation(s)

14 Changes in species distributions	Threat	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, H6410 Purple moor-grass meadows, H7140 Very wet mires often identified by an unstable `quaking` surface, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7230 Calcium-rich springwater-fed fens, H91E0 Alder woodland on floodplains, S1016 Desmoulin`s whorl snail, S1355 Otter, S1903 Fen orchid, S4056 Little ramshorn whirlpool snail	Monitor vegetation and invertebrate change	Environment Agency, Natural England, The Broads Authority
15 Public Access/Disturbance	Threat	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, S1355 Otter	Minimise disturbance through a partnership approach	Natural England, The Broads Authority
16 Undergrazing	Pressure	H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), S1016 Desmoulin`s whorl snail, S1355 Otter	Reduce undergrazing	Natural England, The Broads Authority
17 Water Pollution	Pressure	H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, S1355 Otter	Implement the Brograve project	Broads IDB, Environment Agency, Natural England
18 Drainage	Pressure	H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H91E0 Alder woodland on floodplains	Implement the Water Level Management Plan	Broads IDB, Environment Agency, Natural England
19 Direct impact from third party	Threat	A051(NB) Gadwall, A056(NB) Shoveler, A151(NB) Ruff	Reduce disturbance of birds	Ministry of Defence (MoD), Natural England, Norfolk Constabulary

20 Inappropriate coastal management	Pressure/ Threat	A021(B) Bittern, A021(NB) Bittern, A037(NB) Bewick's swan, A038(NB) Whooper swan, A050(NB) Wigeon, A051(NB) Gadwall, A056(NB) Shoveler, A081(B) Marsh harrier, A082(NB) Hen harrier, A151(NB) Ruff, H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, H6410 Purple moor-grass meadows, H7140 Very wet mires often identified by an unstable `quaking` surface, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7230 Calcium-rich springwater-fed fens, H91E0 Alder woodland on floodplains, S1016 Desmoulin`s whorl snail, S1355 Otter, S1903 Fen orchid, S4056 Little ramshorn whirlpool snail	Short-term and long-term measures to ensure a sustainable Broads/ coast interface.	Environment Agency, Natural England, The Broads Authority
21 Air Pollution: impact of atmospheric nitrogen deposition	Pressure	A021(NB) Bittern, A037(NB) Bewick's swan, A038(NB) Whooper swan, A050(NB) Wigeon, A051(NB) Gadwall, A056(NB) Shoveler, A081(B) Marsh harrier, A082(NB) Hen harrier, A151(NB) Ruff, H3140 Calcium-rich nutrient-poor lakes, lochs and pools, H3150 Naturally nutrient-rich lakes or lochs which are often dominated by pondweed, H6410 Purple moor-grass meadows, H7140 Very wet mires often identified by an unstable `quaking` surface, H7210 Calcium-rich fen dominated by great fen sedge (saw sedge), H7230 Calcium-rich springwater-fed fens, H91E0 Alder woodland on floodplains, S1016 Desmoulin`s whorl snail, S1355 Otter	Develop a Site Nitrogen Action Plan	Not yet determined

Issues and Actions

This table outlines the prioritised issues that are currently impacting or threatening the condition of the features, and the outstanding actions required to address them. It also shows, where possible, the estimated cost of the action and the delivery bodies whose involvement will be required to implement the action. Lead delivery bodies will be responsible for coordinating the implementation of the action, but not necessarily funding it. Delivery partners will need to support the lead delivery body in implementing the action. In the process of developing the SIPs Natural England has approached the delivery bodies to seek agreement on the actions and their roles in delivering them, although in some cases these discussions have not yet been concluded. Other interested parties, including landowners and managers, will be involved as the detailed actions are agreed and delivered. Funding options are indicated as potential (but not necessarily agreed or secured) sources to fund the actions.

1 Water Pollution

Diffuse water pollution (DWP) is a key issue potentially affecting all Broads sites and remains one of the priority issues to address in the Broads. There are a variety of sources, pathways and effects, and interactions with climate change. Hence, a variety of solutions is required to address the problem. In many cases measures are required throughout the catchment, rather than within the site or adjacent to the site. The over-arching mechanism for identifying and actioning DWP issues are DWP Plans. These should be used to drive DWP action throughout the Broads where they exist. DWP actions should be undertaken throughout the whole Broads' catchment, and new plans drawn up where the need is identified.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1A	Reduce diffuse pollution in the catchment from agriculture and roads by targeting agri-environment/ Catchment Sensitive Farming agreements. This should target specific sources and pathways for nutrients entering designated sites, such that all water bodies (including dykes) meet their SAC and Water Framework Directive water chemistry targets.	Not yet determined	2027	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	New Environmental Land Management Scheme (NELMS), Catchment Sensitive Farming (CSF)	Natural England	Environment Agency, Internal Drainage Board(s)(IDB), Broadland Rivers Catchment Partnership

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1B	Identify where roads are acting as sources/ pathways for nutrients entering the water bodies of the Broads.	Not yet determined	2014-17	Diffuse Water Pollution Plan	Environment Agency, Water Framework Directive (WFD), Grant in aid	Environment Agency/ Natural England	Norfolk County Council

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1C	Implement on the ground measures to rectify any DWP issues associated with roads.	Not yet determined	2017-20	Diffuse Water Pollution Plan	Local authority (Highways)	Norfolk County Council	Suffolk County Council

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1D	Investigate sources and pathways of diffuse pollution in the catchment from agriculture and roads in areas outside of DWP plans.	£200,000	2014-17	Investigation / Research / Monitoring	Environment Agency, Natural England, Water Framework Directive (WFD), Grant in aid, Catchment Sensitive Farming (CSF)	Environment Agency	Natural England, The Broads Authority, Internal Drainage Board(s)(IDB), Broadland Rivers Catchment Partnership

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1E	Develop solutions for known non-mains sources of sewage pollution and address through appropriate mechanisms.	Not yet determined	2014-17	Investigation / Research / Monitoring	Environment Agency, Water Framework Directive (WFD), Grant in aid	Environment Agency	Anglian Water Services Ltd, Natural England, The Broads Authority

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
1F	Provide advice on minimising diffuse pollution from agriculture/ roads, and ochre contamination resulting from catchment management (see also Water Level Management Plan actions).	Not yet determined	2020	England Catchment Sensitive Farming (CSF)	Catchment Sensitive Farming (CSF)	Natural England	Great Yarmouth Borough Council, Internal Drainage Board(s) (IDB), Natural England, North Norfolk District Council, South Norfolk District Council, The Broads Authority, Waveney District Council, Broadland Rivers Catchment Partnership

2 Water Pollution

Saline incursion is an increasing threat to much of the Broads' system (although most acutely in the lower Broads) due to climate change and increasing likelihood of both regular and extreme tidal impacts.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
2A	Investigate the nature and effects of saline incursion (general and episodic), and where associated with inappropriate dyke management in the catchment. This should include an assessment of likely changes resulting from climate change.	£20,000	2014-20	Investigation / Research / Monitoring	Environment Agency, Natural England, Water Framework Directive (WFD), National Park Authority	Environment Agency	Natural England, The Broads Authority

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
2B	Identify any measures to improve the resilience of freshwater habitats. Explore the potential application of barriers and/or salt curtains.	£10,000	2015-17	Investigation / Research / Monitoring	Environment Agency, Natural England, Water Framework Directive (WFD), National Park Authority	Environment Agency	Natural England, The Broads Authority

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
2C	Implement measures identified to improve the resilience of the Broads to saline incursion.	£70,000	2017-20	Flood Risk Maintenance Programme: Flood Risk Management - Capital/ Improvement Schemes	Environment Agency, Water Framework Directive (WFD), Grant in aid	Environment Agency	Natural England, The Broads Authority

3 Water Pollution

Many point sources of pollution have been addressed in the Broads. However, some points sources require additional work to reduce their contribution of nutrients and/ or other pollutants to the Broads' water bodies.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
3A	Further actions to reduce phosphate entering the Broads from sewage treatment works (e.g. Stalham), particularly where linked to increases in development.	Not yet determined	2020-25	Water Industry Asset Management Plan (AMP): Implement Plan Scheme	AMP process	Anglian Water Services Ltd	Environment Agency

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
3B	Address pollutants entering the Broads through boat yard and boating operations.	Not yet determined	2015-20	Navigation Works (Broads Authority)	National Park Authority	The Broads Authority	Environment Agency

4 Climate change

Climate change is a cross-cutting issue that potentially impacts on many of the other identified issues. There is a need to improve the understanding of the potential effects on the Broads and the features it supports. This will be with a view to developing appropriate adaptation strategies going forward into the future.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
4A	Improve understanding of potential impacts of climate change on Broads' features, and develop an adaptation strategy to address the impacts into the future.	£50,000	2014-20	Habitat creation / restoration strategy: Other	Natural England	Natural England	Not yet determined

5 Invasive species

Invasive species involving a number of different species are impacting on SAC and SPA features; this is a key issue in the Broads and could be exacerbated by climate change.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
5A	Draw up an Invasive Control Plan for the Broads, including climate change predictions on species/ distributions.	£20,000	2015-17	Invasive Control Plan: Invasive Species Control Programme	Local Authority, Natural England, Non-native species project, National Park Authority	Norfolk County Council	Environment Agency, Internal Drainage Board(s) (IDB), Natural England, Norfolk County Council, Norfolk Wildlife Trust, RSPB, Suffolk Wildlife Trust, The Broads Authority

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
5B	Monitor current and future invasives and determine effective control methods throughout the Broads.	Not yet determined	2020	Investigation / Research / Monitoring	Local Authority, Natural England, Non-native species project, National Park Authority	Norfolk County Council	Environment Agency, Internal Drainage Board(s) (IDB), Natural England, Norfolk County Council, Norfolk Wildlife Trust, RSPB, Suffolk Wildlife Trust, The Broads Authority

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
5C	Increase public awareness of invasive species with a view to reducing not-native introductions and improving biosecurity.	£75,000	2015-20	Invasive Control Plan: Invasive Species Control Programme	Local Authority, Natural England, Non-native species project, National Park Authority	Norfolk County Council	Environment Agency, Internal Drainage Board(s) (IDB), Natural England, Norfolk County Council, Norfolk Wildlife Trust, RSPB, Suffolk Wildlife Trust, The Broads Authority

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
5D	Control and eradication of Himalayan balsam.	Not yet determined	2014-20	Invasive Control Plan: Invasive Species Control Programme	Local Authority, Natural England, Non-native species project, National Park Authority	Norfolk County Council	Environment Agency, Internal Drainage Board(s) (IDB), Natural England, Norfolk County Council, Norfolk Wildlife Trust, RSPB, Suffolk Wildlife Trust, The Broads Authority

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
5E	Control and eradication of *Crassula helmsii*.	Not yet determined	2014-20	Invasive Control Plan: Invasive Species Control Programme	Local Authority, Natural England, Non-native species project, National Park Authority	Norfolk County Council	Environment Agency, Internal Drainage Board(s) (IDB), Natural England, Norfolk County Council, Norfolk Wildlife Trust, RSPB, Suffolk Wildlife Trust, The Broads Authority

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
5F	Control and eradication of floating pennywort.	£5,000	2014-20	Invasive Control Plan: Invasive Species Control Programme	Local Authority, Natural England, Non-native species project, National Park Authority	Norfolk County Council	Environment Agency, Internal Drainage Board(s) (IDB), Natural England, Norfolk County Council, Norfolk Wildlife Trust, RSPB, Suffolk Wildlife Trust, The Broads Authority

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
5G	Control and eradication of Red Elder at Alderfen broad ; also adjacent to the site to prevent recolonisation.	£5,000	2014-20	Invasive Control Plan: Invasive Species Control Programme	Local Authority, Natural England, External funding, Wildlife Trust, Non-native species project, National Park Authority	Norfolk Wildlife Trust	Environment Agency, Internal Drainage Board(s) (IDB), Natural England, Norfolk County Council, Norfolk Wildlife Trust, RSPB, Suffolk Wildlife Trust, The Broads Authority

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
5H	Control mink and monitor the effectiveness of the control programme for the duration of the current mink control strategy.	£32,000	2014-20	Invasive Control Plan: Invasive Species Control Programme	Other stakeholder(s) contributions	Local partnership	Environment Agency, Internal Drainage Board(s) (IDB), Norfolk Wildlife Trust, RSPB, Suffolk Wildlife Trust, The Broads Authority

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
5I	Monitor current and future invasives and determine effective control methods throughout the Broads. this relates to species such as Killer Shrimp, where no effective control methods have been identified for the Broads; it also relates to the monitoring of existing and future invasives with a view to implementing effective control.	Not yet determined	2014-20	Investigation / Research / Monitoring	Local Authority, Natural England, Non-native species project, National Park Authority	Norfolk County Council	Environment Agency, Internal Drainage Board(s) (IDB), Natural England, Norfolk County Council, Norfolk Wildlife Trust, RSPB, Suffolk Wildlife Trust, The Broads Authority

6 Siltation

Many of the open water bodies in the Broads have been subjected to siltation over many decades. Whilst many sites have been in receipt of a range of lake restoration measures, a number of sites require significant lake restoration to restore SAC quality open water features. There is a strong link to DWP to ensure that sediment/nutrient sources are largely removed in conjunction with lake restoration works.

Action	Action description	Cost estimate	Timescale	Mechanism	Funding option	Delivery lead body	Delivery partner(s)
6A	Implementation of Lake restoration Plans to restore open water bodies impacted by siltation and nutrient enrichment (currently Hickling, Hoveton Great, Hudson's Bay, Trinity Broads (non Review of Consents), Round Water, Woolner's Carr). This will principally involve sediment removal, but may also include a range of other biomanipulation techniques.	£10,000,000	2014-30	Lake Restoration Project	LIFE, Heritage Lottery Fund (HLF), Water Framework Directive (WFD)	Natural England	Environment Agency, Essex And Suffolk Water, Norfolk Wildlife Trust, Suffolk Wildlife Trust, The Broads Authority

7 Inappropriate water levels

Water level management is key to the maintenance of features throughout the Broads. As such, it is essential that the correct water management infrastructure and operating protocols are in place to deliver the optimum hydrological regime for the features of interest at a site, also in the context of a changing climate. Operating procedures need to be updated at a number of locations following the implementation of Water Level Management Plan works.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
7A	Review Water Level Management Plans (WLMP) where water management remains an issue or where there is a need to revise operating procedures following completed WLMP works.	£100,000	2014-18	Water Level Management Plan	Environment Agency, Grant in aid, Flood Risk Capital Programme	Broads IDB	Environment Agency, Natural England, The Broads Authority

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
7B	Put in place Water Level Management infrastructure	Not yet determined	2014-20	Water Level Management Plan	Environment Agency, Grant in aid, Flood Risk Capital Programme	Broads IDB	Environment Agency, Natural England, The Broads Authority

8 Inappropriate water levels

Appropriate water level management is critical to the maintenace of dykes and infield water features (for breeding waders). Where landowners choose not to enter appropriate agri-environment agreements, other mechanisms need to be found to deliver the appropriate regime.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
8A	Manage water levels to support the notified features of interest through implementation of appropriate agri-environment measures.	No additional costs	2014-18	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	New Environmental Land Management Scheme (NELMS)	Natural England	Internal Drainage Board(s) (IDB), The Broads Authority

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
8B	Use WLMPs to deliver appropriate water levels to support the notified features of interest where there is no agri-environment mechanism in place.	£30,000	2014-18	Water Level Management Plan	Environment Agency, Grant in aid, Flood Risk Capital Programme	Broads IDB	Environment Agency, Natural England

9 Hydrological changes

Water availability to sites from both surface and groundwater sources will come under increasing pressure in a changing climate. This relates to both management of water within sites and also in their wider catchments.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
9A	Investigation into the sustainability of groundwater and surface water supply to sites, particularly in the context of a changing climate. Take measures to ensure sustainability of supply and water chemistry.	Not yet determined	2014-20	Investigation / Research / Monitoring	Not yet determined	Environment Agency	Natural England

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
9B	Review the likely climate change impacts on surface and groundwater hydrology and identify appropriate adaptation actions.	Not yet determined	2025	Investigation / Research / Monitoring	Environment Agency	Environment Agency	Natural England, The Broads Authority

10 Water abstraction

Water abstraction is a key issue potentially affecting the full range of Broads' habitats and species. Whilst many of the concerns have been addressed through EA's Review of Consents (RoC) and Restoring Sustainable Abstraction (RSA) programmes, and the water companies' Asset Management Plan (AMP) programme, there remain concerns in some situations, and also a need to review licences in the context of a changing climate.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
10A	Investigate sites where hydrological changes may be impacting on site features and abstraction is a potential contributory factor. Address specific issues identified, either through Environment Agency licensing or Asset Management Plan.	Not yet determined	2020	Restoring Sustainable Abstraction Programme: Abstraction Licence - Revoke/Amend	Environment Agency	Environment Agency	Essex And Suffolk Water, Natural England

11 Change in land management

Changes in land management within the catchment of sites as a result of expiring agreements and/or changes in land management practice could have a significant impact on water supply and quality affecting sites.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
11A	Effective delivery of agri-environment schemes to ensure that changes in land management within the catchment do not have a significant impact on water supply and quality affecting sites.	Not yet determined	2014-20	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	New Environmental Land Management Scheme (NELMS)	Natural England	Environment Agency, Great Yarmouth Borough Council, Internal Drainage Board(s) (IDB), North Norfolk District Council, South Norfolk District Council, The Broads Authority, Waveney District Council

12 Inappropriate ditch management

Understanding of the role and function of catch dykes (dykes lying between the floodplain and the upland) is indicating that they may play a key role both in the transfer of diffuse pollution into sites, the interuption of the hydroseral succession from wet to dry habitats on the valley sides, impacts on water chemistry, and impacts on saline incursion.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
12A	Develop and implement a programme of trials and monitoring to implement the findings of the recent catch dyke project.	Not yet determined	2014-20	Habitat creation / restoration strategy: Habitat restoration	Natural England, Internal Drainage Board (IDB), New Environmental Land Management Scheme (NELMS), External funding, National Park Authority	Natural England	Broads IDB, The Broads Authority

13 Inappropriate scrub control

Encroachment of scrub into fens remains an issue across the Broads, either in terms of one-off capital programmes or ongoing maintainence. This issue has to a large degree been addressed through the large capital programmes over the last 20 years, and maintenance through agri-environment. It remains an issue on sites outside agreement, where HLS payments are insufficient to meet costs, and where the expertise is not available to deliver the works.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
13A	Develop and implement a programme of further work to address scrub encroachment on sites where this remains an issue.	Not yet determined	2014-20	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	New Environmental Land Management Scheme (NELMS)	Natural England	The Broads Authority, Voluntary conservation organisation(s)

14 Changes in species distributions

Understanding changes in principally plant and invertebrate species and communities (in terms of distribution and composition) over time are critical to identifying general and site-specific trends, particularly in a changing climate and changes in salinity. This in turn allows issues to be identified and addressed at an early stage.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
14A	Resurvey the Broads Fen Survey Plant and Invertebrate Samples on a ten year cycle to identify changes in distribution/ composition of communities. Take action on issues identified as a result of the survey.	£600,000	2016-20	Investigation / Research / Monitoring	Natural England, External funding, National Park Authority	The Broads Authority	Natural England

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
14B	Vegetation and hydrological monitoring to identify causes of vegetation change observed in parts of the Ant valley.	£50,000	2014-20	Investigation / Research / Monitoring		Environment Agency	Natural England

15 Public Access/Disturbance

Recreational impacts on SAC habitats and disturbance to wintering waterfowl in particular, is an issue on a number of Broads' sites. This is largely a result of boat-based use of the water bodies.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
15A	Work with partners and stakeholders to influence behaviour to minimise recreational disturbance to vulnerable site features. In the first instance, research is needed to establish best practice for recreational users, and protocols for the evidence base to be used in cases where damage may occur. Upper Thurne Broads & Marshes has been specifically identified, although this is an issue throughout the Broads.	£50,000	2014-20	Investigation / Research / Monitoring	Natural England, Not yet determined, National Park Authority	The Broads Authority	Natural England

16 Undergrazing

Undergrazing is an issue on a number of sites within the Broads that have been historically grazed or require grazing. Often the issues are associated with the difficult ground, the difficulty of implementing grazing infrastructure, and/ or the lack of suitable stock. This can also impact on dyke margins, as is the case at Muckfleet Marshes.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
16A	Work with landowners and/or graziers to implement appropriate grazing on undergrazed sites.	Not yet determined	2014-20	Rural Development Programme for England (RDPE): Common Agricultural Policy 2014-20 (New Environmental Land Management Scheme)	New Environmental Land Management Scheme (NELMS)	Natural England	The Broads Authority

17 Water Pollution

Diffuse pollution from the Brograve level due to past drainage in the catchment has lead to elevated salinity and ochre levels in both Horsey Mere and Hickling Broad. The Brograve project is currently a study to investigate possible mechanisms to moderate the impact of saline drainage water on the Upper Thurne Broads and Marshes. A field-scale trial is currently underway and depending on the results of this, sub-catchment scale studies may follow. If the mechanisms are shown to be effective, implementation would require changes in drainage infrastructure, water level management and land use, which would occur significant additional costs.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
17A	Monitoring of salinity and the implementation of trial engineering solutions to combat ochre and saline intrusion into the Upper Thurne Broads & Marshes SAC/ SPA.	£683,000	2014-21	Investigation / Research / Monitoring	Environment Agency, Grant in aid, Flood Risk Capital Programme	Broads IDB	Environment Agency, Natural England

18 Drainage

A Water Level Management Plan to address ochre has now been costed and is planned to be delivered by 2015 by the Broads IDB. Recent developments in the catchment mean that this plan now needs to be reviewed to identify whether the proposed solution or an alternative solution is still required.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
18A	Implement the Water Level Management Plan to address ochre issue at Sutton (draining to Hand Marsh and Sutton Broad) (see Bingham Associates report, 2010).	£250,000	2015-16	Water Level Management Plan	Environment Agency, Grant in aid, Flood Risk Capital Programme	Broads IDB	Environment Agency, Natural England

19 Direct impact from third party

The presence of military and police aircraft performing training exercises within the SPA is causing disturbance to the wildfowl interest features.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
19A	Reduce the bird disturbance by military/ police at Cantley Marshes.	No direct costs	2014-15	Advice: Negotiation	n/a	Natural England	Ministry of Defence (MoD), Norfolk Constabulary

20 Inappropriate coastal management

The presence of the sea wall at Winterton-Horsey Dunes compromises the coastal processes, and the dynamism within the dune features. This is a difficult issue to address due to the historical management of the coast, the complexities of the coastal environment, potential impacts on the Broads (Upper Thurne Broads & Marshes SSSI), and potential impacts on people and property. This is managed through the Shoreline Management Plan.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
20A	The next Eccles to Winterton coastal strategy will need to identify the direction of travel within the context of the long-term issues associated with the historic management of the coast, and its interface with the Broads. This will be underpinned by studies and involve external consultation.	Not yet determined	2015-20	Shoreline Management Plan and Strategies	Environment Agency	Environment Agency	Natural England, The Broads Authority, Other

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
20B	A suite of short-term adaptive measures to the coastal environment will need to be considered on the road to a long-term solution.	Not yet determined	2015-20	Shoreline Management Plan and Strategies	Environment Agency	Environment Agency	Natural England, The Broads Authority, Other

21 Air Pollution: impact of atmospheric nitrogen deposition

Nitrogen deposition exceeds the site relevant critical load for ecosystem protection and hence there is a risk of harmful effects, particularly in the light of a changing climate.

Action	*Action description*	*Cost estimate*	*Timescale*	*Mechanism*	*Funding option*	*Delivery lead body*	*Delivery partner(s)*
21A	Control, reduce and ameliorate atmospheric nitrogen impacts	Not yet determined	2014-20	Site Nitrogen Action Plan	Not yet determined	Not yet determined	Not yet determined

Site details

The tables in this section contain site-relevant contextual information and links

Qualifying features

#UK Special responsibility

Broadland SPA	A021(B) *Botaurus stellaris*: Great bittern
	A037(NB) *Cygnus columbianus bewickii*: Bewick swan
	A050(NB) *Anas penelope*: Eurasian wigeon
	A056(NB) *Anas clypeata*: Northern shoveler
	A038(NB) *Cygnus cygnus*: Whooper swan
	A051(NB) *Anas strepera*: Gadwall
	A081(B) *Circus aeruginosus*: Eurasian marsh harrier
	A082(NB) *Circus cyaneus*: Hen harrier
	A151(NB) *Philomachus pugnax*: Ruff
The Broads SAC	H3140 Hard oligo-mesotrophic waters with benthic vegetation of *Chara spp*
	H3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation
	S1016 *Vertigo moulinsiana*: Desmoulin`s whorl snail
	H91E0# Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)*
	H6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)
	S1355 *Lutra lutra*: Otter
	S1903 *Liparis loeselii*: Fen orchid
	S4056 *Anisus vorticulus*: Little ramshorn whirlpool snail
	H7140 Transition mires and quaking bogs
	H7210# Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*

H7230 Alkaline fens

Site location and links

Broadland SPA

Area (ha) **5462.4**	*Grid reference*	**TG430211**	Map link
Local Authorities			Norfolk; Suffolk
Site Conservation Objectives			European Site Conservation Objectives for Broadland SPA
European Marine Site conservation advice			n/a
Regulation 33/35 Package			n/a
Marine Management Organisation site plan			n/a

The Broads SAC

Area (ha) **5889.66**	*Grid reference*	**TG438209**	Map link
Local Authorities			Norfolk; Suffolk
Site Conservation Objectives			European Site Conservation Objectives for The Broads SAC
European Marine Site conservation advice			n/a
Regulation 33/35 Package			n/a
Marine Management Organisation site plan			n/a

Water Framework Directive (WFD)

The Water Framework Directive (WFD) provides the main framework for managing the water environment throughout Europe. Under the WFD a management plan must be developed for each river basin district. The River Basin Management Plans (RMBP) include a summary of the measures needed for water dependent Natura 2000 sites to meet their conservation objectives. For the second round of RBMPs, SIPs are being used to capture the priorities and new measures required for water dependent habitats on Natura 2000 sites. SIP actions for non-water dependent sites/habitats do not form part of the RBMPs and associated consultation.

Additional information is provided on targets for flow and some water quality parameters, in order to meet the conservation objectives for certain Natura 2000 sites. The relevant targets are identified in the revised conservation objectives document (see link to PDF below).

These targets have been revised for a number of Natura 2000 rivers and lakes, following a review by the conservation agencies of Common Standards Monitoring Guidance. For rivers, this is done through local discussions between Natural England and Environment Agency staff. For lake sites, the only parameter where alignment of standards was reviewed was phosphorus and so this work was undertaken jointly at a national level.

The linked PDF documents include the proposed target values, and also set out an 'interim progress goal', that will need to be achieved by 2021. Where sufficient information is available the document also identifies a timescale for achievement of the longer-term target. For any sites where it has not been possible to agree specific targets, usually because further technical work is required, these will be indicated in the documents by an asterisk. For further information please see Part 2 of the River Basin Plan

Broadland SPA

River basin	Anglian RBMP
WFD Management catchment	Broadland Rivers
WFD Waterbody ID (Cycle 2 draft)	GB105034050830, GB105034050860, GB105034050890, GB105034050970, GB105034051210, GB105034051310, GB105034051330, GB105034051360, GB105034055710, GB30535640, GB30535645, GB30535655, GB30535738, GB30535959, GB30535977, GB30536029, GB30536050, GB30536202, GB30536730, GB30537033, GB30547012
Locally revised Conservation Objectives	
Additional information on locally revised Conservation Objectives	n/a
EA/ NE agreed RBMP lake SAC targets	n/a

River Restoration Plan

Source of information on river restoration plans for SAC rivers where these are in place or planned, with links to documentation where this is available.

Webpage link: Restoring Designated Rivers	n/a
River Restoration Plan document	n/a

The Broads SAC

River basin	Anglian RBMP
WFD Management catchment	Broadland Rivers

WFD Waterbody ID (Cycle 2 draft)	GB105034050830, GB105034050860, GB105034050890, GB105034050970, GB105034051210, GB105034051310, GB105034051330, GB105034051360, GB105034055710, GB30535640, GB30535645, GB30535655, GB30535738, GB30535959, GB30535977, GB30536029, GB30536050, GB30536202, GB30536730, GB30537033, GB30547009, GB30547010, GB30547011, GB30547012
Locally revised Conservation Objectives	
Additional information on locally revised Conservation Objectives	n/a
EA/ NE agreed RBMP lake SAC targets	Proposed total phosphorus targets for Lake Natura 2000 Protected Area Special Areas of Conservation for the updated river basin management plan consultation

River Restoration Plan

Source of information on river restoration plans for SAC rivers where these are in place or planned, with links to documentation where this is available.

Webpage link: Restoring Designated Rivers	n/a
River Restoration Plan document	n/a

Overlapping or adjacent protected sites

Site(s) of Special Scientific Interest (SSSI)	
Broadland SPA	Yare Broads & Marshes SSSI
	Stanley & Alder Carrs, Aldeby SSSI
	Upper Thurne Broads & Marshes SSSI
	Smallburgh Fen SSSI
	Poplar Farm Meadows, Langley SSSI
	Shallam Dyke Marshes, Thurne SSSI
	Ludham-Potter Heigham Marshes SSSI
	Halvergate Marshes SSSI
	Barnby Broad & Marshes SSSI
	Hall Farm Fen, Hemsby SSSI
	Geldeston Meadows SSSI
	Decoy Carr, Acle SSSI
	Burgh Common & Muckfleet Marshes SSSI
	Cantley Marshes SSSI
	Priory Meadows, Hickling SSSI
	Sprat's Water & Marshes, Carlton Colville SSSI
	Bure Broads & Marshes SSSI
	Broad Fen, Dilham SSSI
	Limpenhoe Meadows SSSI
	Ant Broads & Marshes SSSI
	Alderfen Broad SSSI
	Hardley Flood SSSI
	Upton Broad & Marshes SSSI
	Ducan's Marsh, Claxton SSSI
	Crostwick Marsh SSSI

The Broads SAC	Calthorpe Broad SSSI
	Crostwick Marsh SSSI
	Burgh Common & Muckfleet Marshes SSSI
	Cantley Marshes SSSI
	Damgate Marshes, Acle SSSI
	Upper Thurne Broads & Marshes SSSI
	Smallburgh Fen SSSI
	Poplar Farm Meadows, Langley SSSI
	Shallam Dyke Marshes, Thurne SSSI
	Ludham-Potter Heigham Marshes SSSI
	Halvergate Marshes SSSI
	Barnby Broad & Marshes SSSI
	Hall Farm Fen, Hemsby SSSI
	Geldeston Meadows SSSI
	Stanley & Alder Carrs, Aldeby SSSI
	Calthorpe Broad SSSI
	Trinity Broads SSSI
	Yare Broads & Marshes SSSI
	Priory Meadows, Hickling SSSI
	Sprat's Water & Marshes, Carlton Colville SSSI
	Bure Broads & Marshes SSSI
	Broad Fen, Dilham SSSI
	Limpenhoe Meadows SSSI
	Ant Broads & Marshes SSSI
	Alderfen Broad SSSI
	Hardley Flood SSSI

	Upton Broad & Marshes SSSI
	Ducan's Marsh, Claxton SSSI
	Decoy Carr, Acle SSSI
National Nature Reserve (NNR)	
Broadland SPA	Ant Broads and Marshes NNR
	Bure Marshes NNR
	Calthorpe Broad NNR
	Hickling Broad NNR
	How Hill NNR
	Ludham & Potter Heigham Marshes NNR
	Martham Broad NNR
	Mid-Yare NNR
The Broads SAC	Ant Broads and Marshes NNR
	Bure Marshes NNR
	Calthorpe Broad NNR
	Hickling Broad NNR
	How Hill NNR
	Ludham & Potter Heigham Marshes NNR
	Martham Broad NNR
	Mid-Yare NNR
Ramsar	
Broadland SPA	Broadland
The Broads SAC	Broadland
Special Areas of Conservation (SAC) and Special Protection Areas (SPA)	
Broadland SPA	The Broads SAC
The Broads SAC	Broadland SPA

Version	*Date*	*Comment*
2.0	08/03/2018	Broads Authority name corrected


Life


NATURA 2000


Environment
Agency


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