APPENDIX 8: HABITATS DIRECTIVE ASSESSMENT

The Habitats Directive (European Council Directive 92/43/EEC) sets out the requirement for assessment of plans or projects affecting Natura 2000 sites. Natura 2000 sites include Special Areas of Conservation (SAC), which are designated under the Habitats Directive (92/43/EEC), and Special Protection Areas (SPA) classified under the 'Birds Directive' (79/409/EEC). In line with Government policy, this assessment also relates to Ramsar sites although these are not strictly part of Natura 2000.

Assessments begin with a screening to examine whether plans is likely to have any significant impacts on a Natura 2000 or Ramsar site, either alone or in combination with other projects and plans, in view of the site's conservation objectives. If significant effects are identified, the plan must be subject to Appropriate Assessment, to consider the impacts and potential mitigation measures.

Draft guidance on HRA of plans was issued by the Department for Communities and Local Government in 2006⁸, and though it was never finalised, it still provides guidance on conducting HRA screening and assessment stages.

The Sustainability Appraisal Scoping Report includes a section (chapter 20) dedicated specifically to Habitats Regulations Assessment, which further explains the process, and provides information on the Natura 2000 sites in the District and surrounding area, their characteristics and current condition. This information is not repeated here.

There is one Natura 2000 site within South Cambridgeshire District, which has been considered as part of this assessment:

Eversden and Wimpole Woods SAC.

There are a number of other sites within the surrounding districts, which have also been considered as part of this Assessment, because of their proximity to South Cambridgeshire and / or the nature of their conservation interest:

Ouse Washes SAC and SPA

⁸ Planning for the Protection of European Sites: Appropriate Assessment (CLG 2006) http://www.communities.gov.uk/documents/planningandbuilding/pdf/160442.pdf

- Fenland SAC
- Portholme SAC
- Devil's Dyke SAC
- Breckland SAC and SPA

Two Ramsar sites are to be considered:

- Ouse Washes
- Fenland (Woodwalton Fen, Chippenham Fen, Wicken Fen)

There is a wide range of impacts and these can be summarised as -

- Land take by developments;
- Impact on protected species found within but which travel outside the protected sites may be relevant where development could result in effects on qualifying interest species within the Natura 2000 or Ramsar site, for example through the loss of feeding grounds for an identified species.
- Increased disturbance, for example from recreational use resulting from new housing development and / or improved access due to transport infrastructure projects;
- Changes in water availability, or water quality as a result of development and increased demands for water treatment, and changes in groundwater regimes due to increased impermeable areas;

• Changes in atmospheric pollution levels due to increased traffic, waste management facilities etc. Pollution discharges from developments such as industrial Developments, quarries and waste management facilities.

At the issues and options stage, an initial assessment has been made of options identified in the issues and options report, to flag up impacts that would need to be explored. The process will be undertaken again at the draft plan stage.

Screening matrices have been prepared to consider potential impacts for each site, and are included in this report.

The initial assessment suggests no significant effects are likely as a result of the options, alone or in combination with other plans. The Council will need to continue to work with stakeholders, Anglian Water, Cambridge Water, and the Environment Agency, to ensure options selected can be appropriately served by water and waste water infrastructure.

A further screening assessment will be carried out at the draft plan stage.

INITIAL HABITATS DIRECTIVE ASSESSMENT SCREENING MATRIX

Nature of potential impact	How the Local Plan (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
Land Take by Development	The Issues and Options Report does not propose any development that will take land from Wimpole and Eversden Woods, and will not result in the direct fragmentation of habitats.	There are no site options which directly impact on the woods.
	No other plans propose development that would take land from this site.	
Impact on protected species outside the protected sites	Eversden and Wimpole Woods are home to the Barbastelle Bat. The bats can forage up to 20km from their roosts but more typically venture around 6-8km. Barbastelle bats require minimal disturbance within 2 km of their roost. The main 'area of importance' for the bats has been examined in the South Cambridgeshire Biodiversity Strategy (and identified in the sustainability appraisal scoping report). A small number of sites options at Comberton fall at the outer edges of this area.	The woods are relatively isolated, and not located near to any of the locations for major development. The woods are also some distance from any villages where small-scale windfall development could take place under the proposed polices regarding windfall development. Due to the distance from the woods, and the scale of development options identified, the potential impacts are not considered to be significant.
Recreational Pressure and	Increasing the dwelling stock in the district dwellings could increase demand for countryside recreation.	No major options in the Issues and Options Report are within 5 kilometres.
Disturbance	Notwithstanding this, Wimpole Woods, and even more so Eversden Woods, does not attract a large number of visitors, and are relatively far from centres of population. Near by car parking is also limited.	Notwithstanding, according to the Natura 2000 Data, the current use of the woods, including public access, is considered compatible with the barbastelle bats' interest and should not affect the barbastelle population or their roosts.
	New strategic open spaces are already planned, and the Green Infrastructure Strategy proposes new countryside recreation opportunities, to support growth in the area.	The existing rights of way through the woods allow for some limited access to the woods but the bats roost in the trees, foraging at sunset/night so are

	It is not considered that the level of public use of the woods will increase greatly as a result of the Core Strategy.	not disturbed by day visitors and numbers will continue to be limited due to the woods relative inaccessibility both from centres of population and from car parking close to the woods.
		There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population.
		In view of the limited additional recreational use that will occur of the woods, there are not considered to be any likely significant effects from options identified in the Issues and Options Report
Water Quantity and Quality	Not relevant for the conservation objectives of this site.	Not relevant.
Changes in Pollution Levels	The level of development proposed in the options report could result in increased levels of atmospheric pollution, through the emissions created by development, or from the car journeys generated.	As the site is not in close proximity to any developments proposed or major transport routes, it is not considered that there is likely to be any significant impact on their nature conservation objectives.
	Whilst the actual impact of the Local Plan on air quality alone or in combination with other plans is difficult to quantify, the location of the site is not in close proximity to any major development options proposed or major transport routes.	The options report proposes general policy requirements that development does not harm the identified European Sites and to address air quality.

Devil's Dyke SAC		
Nature of potential impact	How the Local Plan (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
Land Take by Development	There are no options in the issues and options report that will take land from Devil's Dyke, and will not result in the direct fragmentation of habitats.	There are no options in the issues and options report which directly impact on the Devil's Dyke.

Impact on protected species outside the protected sites	The conservation objectives relate to species of plant within the grassland. Therefore there are no species listed as important to the integrity of the site that travel to forage outside the site.	Due to the distance of the site from the District and as there are no species listed as important to the integrity of the site that travel to forage outside the site there is not likely to be any significant effect from any options in the issues and options report.
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district dwellings could increase demand for countryside recreation. However, no options are within 5km of the site.	No major options in the Issues and Options Report are within 5 kilometres. Notwithstanding, the impact of public access is not
	Devils Dyke is accessed via a long distance footpath that runs the length of the dyke. There is parking available at the July Race course, Newmarket. The site is over 10km from the development proposed at Cambridge East. It is not considered that the level of public use of the Devil's Dyke footpaths will increase greatly as a result of options identified.	In view of the limited additional recreational use that will occur of the site, there are not considered to be any likely significant effects from options identified in the Issues and Options Report.
Water Quantity and Quality	Not relevant for the conservation objectives of this site.	Not relevant.
Changes in Pollution Levels	The level of development proposed by the local plan could result in increased levels of atmospheric pollution, through the emissions created by development, or from the car journeys generated.	As the site is not in close proximity to the options proposed, it is not considered that there is likely to be any significant impact on their nature conservation objectives.
	Whilst the actual impact of the Local Plan on air quality alone or in combination with other plans is difficult to quantify, the location of the site is not in close proximity to any development options.	The options report proposes general policy requirements that development does not harm the identified European Sites and to address air quality.

Wicken Fen - SAC and Ramsar site		
Nature of potential impact	How the Local Plan (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
Land Take by Development	The Local Plan Issues and Options Report does not propose any development that will take land from Wicken Fen, and will not result in the direct fragmentation of habitats.	There are no options which directly impact on Wicken Fen.
Impact on protected species outside the protected sites	The conservation objectives relate to species of plant within the fen, and species of invertebrates. The options identified in the Local Plan will not have a significant impact on species listed as important to the integrity of the site.	Due to the distance of the site from the District it is not considered that there is likely to be a significant effect from the options identified.
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district could increase demand for countryside recreation. However, no options identified are within 5km of the site. It is not considered that the level of public use of Wicken Fen will increase greatly as a result of options identified in the issues and options report. There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population. New strategic open spaces are already planned, and the Green Infrastructure Strategy proposes new countryside recreation opportunities, to support growth in the area.	No options identified are within 5km of the site. Notwithstanding, public access to Wicken Fen is managed by the National Trust. There is a visitor centre and shop, nature trails, three hides and 16km of walking routes. Entry is by permit only to help control visitor numbers. Visitors are also managed by 'zoning ' parts of the Fen near the entrance, leaving the more remote parts of the site relatively undisturbed. The impact of public access is not listed in the vulnerabilities relating to the site.
Water Quantity and Quality	Development could theoretically have an impact on water quantity, through run off from development sites, or water use. It could also have an impact on water quality, through additional waste products produced. The water level problems identified as a vulnerability of the site primarily relate to its relationship with the river Cam and	The Cambridge Water Cycle Strategy 2011 states that analysis of hydrology indicates that Wicken Fen is topographically higher than the Cam and drains via Wicken Lode then Burwell Lode towards it. As the Cam does not feed it, there are no associated risks, which could arise from additional sewage effluent discharge at Cambridge

	issues caused by flood protection measures local to the site introduced in the 1960's.	irrespective of any changes in effluent flow or quality from that site. Options are proposed in the issues and options report to ensure developments protects water quality, insuring appropriate waste water infrastructure is available, and appropriate pollution control measures are included on sites The Council is working with Anglian Water and Cambridge water to explore infrastructure requirements of site options, and ensure developments can be appropriately serviced.
Changes in Pollution Levels	The level of development proposed by the local plan could result in increased levels of atmospheric pollution, through the emissions created by development, or from the car journeys generated. Whilst the actual impact of the Local Plan on air quality alone or in combination with other plans is difficult to quantify, the location of the site is not in close proximity to any development options.	As the site is not in close proximity to site options proposed, there are likely to be no significant impacts on their nature conservation objectives. The options report proposes general policy requirements that development does not harm the identified European Sites and to address air quality

Chippenham Fen- SAC and Ramsar site		
Nature of potential impact	How the Local Plan (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
Land Take by Development	The Issues and options report does not identify any options that will take land from Chippenham Fen, and will not result in the direct fragmentation of habitats.	There are no options which directly impact on Chippenham Fen.
Impact on protected	The conservation objectives relate to species of plant within	Due to the distance and the nature of locations
species outside the	the fen, and species of invertebrates. Due to the distance of	proposed for development, it is also not considered

protected sites	the site from the District there is likely to be no effect.	there will be any impact on breeding bird species associated with the fen. Therefore, the development of land in locations identified by the Issues and Options Report alone or in combination with other plans is not likely to have a significant impact on specifies listed as important to the integrity of the site.
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district could increase demand for countryside recreation. However, no options identified are within 5km of the site. Access to the wider site away from rights of way is limited. The site is a significant distance from development options identified in the Issues and Options Report. There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population. New strategic open spaces are already planned, and the Green Infrastructure Strategy proposes new countryside recreation opportunities, to support growth in the area.	It is not considered that the level of public use of Chippenham Fen will increase greatly as a result of options in the Issues and Options Report alone or in combination with other plans and that there will therefore be no likely significant effects on the site.
Water Quantity and Quality	Development could theoretically have an impact on water quantity, through run off from development sites, or water use. It could also have an impact on water quality, through additional waste products produced. However, the fen is some distance from options proposed, and is not located on a watercourse utilised to drain the District.	Options are proposed in the issues and options report to ensure developments protects water quality, insuring appropriate waste water infrastructure is available, and appropriate pollution control measures are included on sites. The Council is working with Anglian Water and Cambridge water to explore infrastructure requirements of site options, and ensure developments can be appropriately serviced.
Changes in Pollution Levels	The level of development proposed by the Issues and Options Report could result in increased levels of atmospheric pollution, through the emissions created by	As the site is not in close proximity to the site options proposed, it is not considered that there is likely to be any significant impact on their nature

development, or from the car journeys generated.	conservation objectives.
	The options report proposes general policy requirements that development does not harm the identified European Sites and to address air quality.

Woodwalton Fen – SAC and Ramsar site		
Nature of potential impact	How the Core Strategy DPD (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
Land Take by Development	The Issues and Options Report does not propose any options that will take land from Woodwalton Fen, and will not result in the direct fragmentation of habitats.	There are options which directly impact on Woodwalton Fen.
Impact on protected species outside the protected sites	The conservation objectives relate to species of plant within the fen. Due to the distance of the site from the District it is likely that there will be no effect.	The Options identified in the Issues and Options Report alone or in combination with other plans will not be likely to have a significant impact on species listed as important to the integrity of the site.
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district could increase demand for countryside recreation. However, the site is a significant distance from the District. Parking is limited at this site – some being available alongside the Great Raveley Drain. There are three marked trails around the fen following the rides. There are no public rights of way across the reserve but visitors are allowed access after obtaining a permit from English Nature.	The impact of public access is not listed in the vulnerabilities relating to the site. It is considered that the level of public use of Woodwalton Fen will not increase greatly as a result of options identified in the Issues and options Report.
	There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population. New strategic open spaces are	

	already planned, and the Green Infrastructure Strategy proposes new countryside recreation opportunities, to support growth in the area.	
Water Quantity and Quality	Development could theoretically have an impact on water quantity, through run off from development sites, or water use. It could also have an impact on water quality, through additional waste products produced. However, the fen is a considerable distance from the district, and is not located on a watercourse utilised to drain the District.	Options are proposed in the issues and options report to ensure developments protects water quality, insuring appropriate waste water infrastructure is available, and appropriate pollution control measures are included on sites The Council is working with Anglian Water and Cambridge water to explore infrastructure requirements of site options, and ensure developments can be appropriately serviced.
Changes in Pollution Levels	The level of development proposed by the Issues and Options Report could result in increased levels of atmospheric pollution, through the emissions created by development, or from the car journeys generated.	As the site is not in close proximity to the options proposed, it is not considered that there is likely to be any significant impact on their nature conservation objectives. There are also general policy requirements within the package of draft LDF documents, although not within the Core Strategy, that development does not harm the identified European Sites and to address air quality.

Nature of potential impact	How the Core Strategy DPD (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant
Land Take by Development	The Issues and Options Report Does not propose any options that will take land from the Ouse Washes, and will not result in the direct fragmentation of habitats.	There are no options which directly impact on the Ouse Washes.
Impact on protected species outside the protected sites	The nature of the options identified, and their location relative to the washes, means that land take is not likely to have a significant impact on species associated with the integrity of the Ouse Washes.	The options identified alone or in combination with other plans will not be likely to have a significant impact on species listed as important to the integrity of the site.
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district could increase demand for countryside recreation. However, the site is some distance from the District. There is a network of public rights of way in the Washes. The RSPB manage a nature reserve at Welches Dam where there is a visitor centre and a number of bird hides. The WWT manage a nature reserve at Welney, Norfolk also with a centre and hides. The nearest point on the Washes is over 7km from the development planned at Northstowe. There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population. This includes the Fen Drayton Lakes near Northstowe. New strategic open spaces are already planned, and the Green Infrastructure Strategy proposes new countryside recreation opportunities, to support growth in the	It is not considered that the level of public use of the Ouse Washes will increase greatly as a result of option sin the Issues and Options Report. Notwithstanding, the impact of public access is not listed in the vulnerabilities relating to the site.
Water Quantity and Quality	Development could theoretically have an impact on water quantity, through run off from the sites, or water use. It could also have an impact on water quality, through additional waste products produced. The majority of the District of South Cambridgeshire drains	Options are proposed in the issues and options report to ensure developments protects water quality, insuring appropriate waste water infrastructure is available, and appropriate pollution control measures are included on sites.

into the River Great Ouse catchment. The Ouse Washes (SAC and Ramsar) form part of this river system. The Swavesey Drain tributary, which drains the northwest part of the District, joins the Great Ouse upstream of the washes.

This drain is also utilised by the Uttons Drove wastewater treatment works, which is planned to be utilised to serve Northstowe, as well as Cambourne.

It is noted that seasonal flooding plays an important role in the integrity of the Ouse Washes. The Great Ouse, including the Ouse washes, has been identified as a Eutrophic Sensitive Area (Eutrophication occurs where the nutrient richness of the water causes excess growth and decay of algae and other plants, leading to a lack of oxygen. This can be detrimental to wildlife).

The Cambridge Water Cycle Strategy explored the impacts of existing planned development at Northstowe and Cambourne being served by Uttons Drove, and concluded no significant effects.

In particular:

- The WwTW can make only a very minor contribution to total flow at Ouse Washes.
- The distance from Uttons Drove WwTW to Ouse Washes is greater than 10 km by river, providing for considerable dilution and dispersal of any contamination between this potential source and potential receptor.

Any requirement for HRA associated with additional sewage discharge rests with Anglian Water Services as the body promoting the change in consented discharge and the Environment Agency as the competent authority considering that revised consent.

The Council will continue to work with Anglian Water, Cambridge water, and the environment Agency to explore infrastructure requirements of sites, and ensure developments can be appropriately serviced.

Changes in Pollution Levels

The level of development proposed by the issues and options report could result in increased levels of atmospheric pollution, through the emissions created by development, or from the car journeys generated.

However, the location of the site is not in close proximity to the options proposed. Options also seek to promote sustainable forms of travel. As the site is not in close proximity to the major options proposed, it is not considered that there is likely to be any significant impact on their nature conservation objectives.

The options report proposes general policy requirements that development does not harm the identified European Sites and to address air quality

Portholme SAC				
Nature of potential impact	How the Core Strategy DPD (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant		
Land Take by Development	The Issues and Options Report does not propose any development that will take land from Portholme, and will not result in the direct fragmentation of habitats.	There are no options which directly impact on Portholme.		
Impact on protected species outside the protected sites	The conservation objectives relate to species of plant within the fen. Due to the distance of the site from the District there will be no effect.	The options will have no significant impact on insect and birds species integral to the site, due to the distance.		
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district could increase demand for countryside recreation. However, the site is a some distance from the District. There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population. This includes the Fen Drayton Lakes near Northstowe. New strategic open spaces are already planned, and the Green Infrastructure Strategy proposes new countryside recreation opportunities, to support growth in the area.	It is not considered that the level of public use of Portholme will increase greatly as a result of the options identified. Also, the impact of public access is not listed in the vulnerabilities relating to the site.		
Water Quantity and Quality	Development could theoretically have an impact on water quantity, through run off from the sites, or water use. It could also have an impact on water quality, through additional waste products produced.	The hay meadows are located up stream on the River Ouse catchment. There are general options proposed in the options report to address water quality and flooding, and to protect designated sites.		
Changes in Pollution Levels	The level of development proposed by the issues and options report could result in increased levels of atmospheric pollution, through the emissions created by development, or from the car journeys generated.	The options report proposes general policy requirements that development does not harm the identified European Sites and to address air quality.		

Whilst the actual impact of the Local Plan options on air quality is difficult to quantify, the location of the site is not in close proximity to the options proposed. Options also seek to promote sustainable forms of travel.	
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Breckland SAC				
Nature of potential impact	How the Core Strategy DPD (alone or in combination with other plans) is likely to affect the European site	Why these effects are not considered significant		
Land Take by Development	The Issues and Options Report does not propose any development that will take land from the Breckland SAC, and will not result in the direct fragmentation of habitats.	There are no options which directly impact on Breckland SAC.		
Impact on protected species outside the protected sites	The conservation objectives relate to heathlands. Due to the distance of the site from the District there will be no effect.	The options will have no significant impact on heathlands integral to the site, due to the distance.		
Recreational Pressure and Disturbance	Increasing the dwelling stock in the district could increase demand for countryside recreation. However, the site is some distance from the District. There are other countryside access opportunities, existing or proposed, available in more accessible locations to the major centres of population. New strategic open spaces are already planned, and the Green Infrastructure Strategy proposes new countryside recreation opportunities, to support growth in the area.	It is not considered that the level of public use of Breckland will increase greatly as a result of the options identified. Also, the impact of public access is not listed in the vulnerabilities relating to the site.		
Water Quantity and Quality	Development could theoretically have an impact on water quantity, through run off from the sites, or water use. It could also have an impact on water quality, through additional waste products produced.	There are general options proposed in the options report to address water quality and flooding, and to protect designated sites. The impact of water use is explored in the Cambridge Water Cycle Strategy. Cambridge Water Company's strategy to provide additional public water supply to developments at Cambridge would include abstracting the full licensed amount from the boreholes in the Thetford area with no additional abstraction over and above this.		

		Between 2000 and 2010 the Environment Agency reviewed all permissions that were granted before the Habitats Regulations came into force (the 'review of consents'). Thus the abstraction licenses currently in force at Euston and Brettenham have been considered to have acceptable levels of risk of groundwater drawdown within the Breckland European sites. Proposed options regarding level off growth are lower than the level of growth of the East of England Plan which guided Cambridge Water Resource Management Plan.
Changes in Pollution Levels	The level of development proposed by the issues and options report could result in increased levels of atmospheric pollution, through the emissions created by development, or from the car journeys generated.	The options report proposes general policy requirements that development does not harm the identified European Sites and to address air quality.
		Whilst the actual impact of the Local Plan options on air quality is difficult to quantify, the location of the site is not in close proximity to the options proposed. Options also seek to promote sustainable forms of travel.