Definitions of Favourable Condition for designated features of interest

These definitions relate to all designated features on the SSSI, whether designated as SSSI, SPA, SAC or Ramsar features.

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Name of Site of Special Scientific Interest (SSSI)	
Ouse Washes (Cambridgeshire, Norfolk)	
Names of designated international sites	
Special Area of Conservation (SAC)	Ouse Washes
Special Protection Area (SPA)	Ouse Washes
Ramsar	Ouse Washes
Relationship between site designations	
The SSSI, SPA and Ramsar boundaries are coincident. The SAC comprises only the Counter Drain/Old Bedford river (outer river) and the Old Bedford/River Delph (inner river) which run parallel with the north western barrier banks from Earith up to the junction with Well Creek, near Denver Sluice (outer river).	

Version control information	
Status of this Version (Draft, Consultation Draft, Final)	Final
Prepared by	John Minney
Date of this version	08 August 2013
Date of generic guidance on favourable condition used	CSM guidance for Birds (Aug, 2004) CSM guidance for Vascular Plants (Feb, 2004) CSM guidance for Lowland Grassland (Feb, 2004) CSM guidance for Freshwater (July, 2005) CSM guidance Ditches (March 2005) CSM guidance Freshwater fauna (August 2005)
Other notes/version history	Based on consultation draft V1.1, 04/03/2010, by Stella Baylis, incorporating advice from national bird specialist.

Quality assurance information		
Checked by	**Name Mark Carey**	**Date 22/11/2013**
	Signature 	

Definitions of Favourable Condition: notes for users

Definitions of Favourable Condition

The definitions comprise one or more condition definitions for the special interest features at this site. These are subject to periodic review and may be updated to reflect new information or knowledge. They will be used by Natural England to determine if a site is in a favourable condition. The standards for favourable condition have been developed and are applied throughout the UK.

Standards for favourable condition are defined with particular reference to the specific designated features listed in Table 1, and are based on a selected set of attributes for features which most effectively define favourable condition as set out in Tables 2, 2a and 3. When an SSSI's features meet these attributes, then they are said to be in 'favourable condition'.

Explanatory text for Tables 2 and 3

Tables 2, 2a and 3 set out the measures of condition which we will use to provide evidence to support our assessment of whether features are in favourable condition. They have been tailored by local staff to reflect the particular characteristics and site-specific circumstances of individual sites. Quality Assurance has ensured that such site-specific tailoring remains within a nationally consistent set of standards. The tables include an audit trail to provide a summary of the reasoning behind any site-specific targets etc. In some cases the requirements of features or designations may conflict; the detailed basis for any reconciliation of conflicts on this site may be recorded elsewhere.

Use under the Habitats Regulations

The Definitions of Favourable Condition (DFCs) are used to periodically measure and assess the condition of both notified SSSI features and designated European Site features.

Where SSSIs also form part of a European Site (such as a SAC or SPA), a separate document containing specific European Site Conservation Objectives will have been prepared. These objectives are those referred to in the Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") and the Habitats Directive 1992. They are for use when either the appropriate nature conservation body or a competent authority is required to make an 'appropriate assessment' of the likely effects of a proposed plan or project on the integrity of a European Site under the relevant parts of the respective legislation. The European Site Conservation Objectives are available at www.naturalengland.org.uk.

The concepts of 'site integrity' and 'favourable condition' are similar and the assessment of a site's condition will measure attributes that also represent aspects of a site's ecological integrity. However, the periodic determination of a site's condition is separate from a judgement about the effect upon a site's overall integrity. This is because the DFCs do not represent a comprehensive or definitive list of all of the elements that might contribute to site integrity, merely those that are most appropriate to monitor in order to rapidly determine site condition. The full range of factors that are components of a site's integrity, and which may need to be considered by an appropriate assessment, will be specified in the European Site Conservation Objectives. Some of the information contained within the DFCs may however contribute to such assessments.

Table 1 Individual designated interest features

BAP Broad Habitat type / Geological Site Type	Specific designated features	Explanatory description of the feature for clarification	SSSI notified interest features	SAC qualifying interest features	SPA qualifying interest features dependency on specific habitats			Ramsar criteria applicable to specific habitats			
					Annex 1 species	Migratory species	Waterfowl assemblage	1a Wetland characteristics	2a Hosting rare species &c	3a 20000 waterfowl	3c 1% of population
Lowland Neutral Grassland	Aggregation of breeding birds: Gadwall *Anas strepera* Mallard *A. platyrhynchos* Garganey *A.querquedula* Shoveler *A. clypeata* Ruff *Philomachus pugnax* Black-tailed Godwit *Limosa limosa limosa* Spotted Crake *Porzana porzana*		 * * * * * *		 * *	 * * * * * 			 * * * * * *		
Lowland Neutral Grassland	Assemblages of breeding birds (lowland Damp Grassland)		*								

BAP Broad Habitat type / Geological Site Type	Specific designated features	Explanatory description of the feature for clarification	SSSI notified interest features	SAC qualifying interest features	SPA qualifying interest features dependency on specific habitats			Ramsar criteria applicable to specific habitats			
					Annex 1 species	Migratory species	Waterfowl assemblage	1a Wetland characteristics	2a Hosting rare species &c	3a 20000 waterfowl	3c 1% of population
Lowland Neutral Grassland	Aggregation of non-breeding birds:										
	Mute Swan *Cygnus olor*		*				*				*
	Bewick's Swan *Cygnus columbianus bewickii*		*		*						*
	Whooper Swan *Cygnus Cygnus*		*		*						*
	Wigeon *Anas Penelope*		*			*	*				
	Gadwall *Anas strepera*		*			*	*				*
	Teal *Anas crecca*		*			*	*				
	Mallard *Anas platyrhynchos*		*								*
	Pintail *Anas acuta*		*			*	*				*
	Shoveler *Anas clypeata*		*			*	*				
	Pochard *Aythya farina*		*			*	*				
	Tufted Duck *Aythya fuligula*		*				*				
	Hen Harrier *Circus cyaneus*				*						
	Coot *Fulica atra*		*				*				
	Ruff *Philomachus pugnax*				*						
	Black-tailed Godwit *Limosa limosa islandica*					*					

BAP Broad Habitat type / Geological Site Type	Specific designated features	Explanatory description of the feature for clarification	SSSI notified interest features	SAC qualifying interest features	SPA qualifying interest features dependency on specific habitats			Ramsar criteria applicable to specific habitats			
					Annex 1 species	Migratory species	Waterfowl assemblage	1a Wetland characteristics	2a Hosting rare species &c	3a 20000 waterfowl	3c 1% of population
Lowland Neutral Grassland	Variety of breeding bird species	More than 65 species regularly present	*								
Lowland neutral grassland	Variety of wintering bird species	More than 90 species are regularly present	*								
Lowland neutral grassland	MG13 *Agrostis stolonifera – Alopecurus geniculatus* grassland	Lowland wet grassland occurring in a mosaic with MG11	*								
Lowland neutral grassland	MG11 *Festuca rubra- Agrostis stolonifera - Alopecurus geniculatus* grassland	Lowland wet grassland occurring as a mosaic with MG13	*								

BAP Broad Habitat type / Geological Site Type	Specific designated features	Explanatory description of the feature for clarification	SSSI notified interest features	SAC qualifying interest features	SPA qualifying interest features dependency on specific habitats			Ramsar criteria applicable to specific habitats			
					Annex 1 species	Migratory species	Waterfowl assemblage	1a Wetland characteristics	2a Hosting rare species &c	3a 20000 waterfowl	3c 1% of population
Standing open water and canals Lowland neutral grassland	Assemblage of nationally rare and scare vascular plants, Score 500	Fringed Water-lily *Nymphoides peltata* (ns),	*								
		Narrow-leaved Water-dropwort *Oenanthe silaifolia* (ns),	*								
		Tasteless Water-pepper *Persicaria mitis* (ns),	*								
		Greater Water Parsnip *Sium latifolium* (ns)	*								
		Greater Dodder *Cuscuta europaea* (ns)	*								
		Marsh Sow-thistle *Sonchus palustris* (ns)	*								
		Ribbon-leaved Water-plantain *Alisma gramineum* (Schedule 8)	*								

BAP Broad Habitat type / Geological Site Type	Specific designated features	Explanatory description of the feature for clarification	SSSI notified interest features	SAC qualifying interest features	SPA qualifying interest features dependency on specific habitats			Ramsar criteria applicable to specific habitats			
					Annex 1 species	Migratory species	Waterfowl assemblage	1a Wetland characteristics	2a Hosting rare species &c	3a 20000 waterfowl	3c 1% of population
Standing open water and canals	Counter Drain/Old Bedford (outer river) and the Old Bedford/River Delph (inner river)	This SSSI feature has coincident boundaries with the SAC feature	*	*							
Standing open water and canals	Spined Loach *Cobitis taenia*	Standing open water and canals		*							

NB. Features where asterisks are in brackets (*) indicate habitats which are not notified for specific habitat interest (under the relevant designation) but because they support notified species.

Table 2 Habitat extent objectives

Extent - Dynamic balance	To maintain the designated features in favourable condition, which is defined in part in relation to a balance of habitat extents (extent attribute). Favourable condition is defined at this site in terms of the following site-specific standards.
	On this site favourable condition requires the maintenance of the extent of each habitat type (either designated habitat or habitat supporting designated species). Maintenance implies restoration if evidence from condition assessment suggests a reduction in extent.

Habitat Feature (BAP Broad Habitat level, or more detailed level if applicable)	**Estimated extent (ha) and date of data source/estimate**	**Site Specific Target range and Measures**	**Comments**
MG11-related MG13-related; Inland wet grassland, *Agrostis-Carex* grassland,	Extent of the mosaic of MG11/MG13 lowland wet grassland circa 705ha (1988)	No reduction in area and any consequent fragmentation without prior consent. Maintain extent of MG11/MG13 mosaic as 705ha (this does not be in exactly the same area of the washland grassland as at notification). Record in period May – July (before hay cut in meadows)	The extent figures are recorded as a mosaic as this was how they were assessed and reported in the NVC surveys in 1972, 1988 and 2001. No data exist for separate MG11 and MG13 extent and no data exist for that mosaic present at renotification in 1983. Note that 705ha of MG11/MG13 recorded in 1988 was thought to be largely more akin to MG11 than MG13.

Habitat Feature (BAP Broad Habitat level, or more detailed level if applicable)	Estimated extent (ha) and date of data source/estimate	Site Specific Target range and Measures	Comments
Lowland neutral grassland	Internal washland grassland is 1900ha (GIS data 2002)	No change in extent of internal washland grassland used by bird features.	The internal washland grassland that is used by breeding and wintering birds is a mosaic of MG9, MG11, MG13 and S28 (extent attribute for MG11/MG13 listed separately – see above). Breeding and wintering birds utilise the full extent of the internal system at different times of year, with the exception of around 20ha of land at the very southern end of the Washes near to Earith village and main road. Note that the 1900ha includes the network of internal ditches, which are utilised by breeding and wintering birds and that are also habitat for the assemblage of nationally rare and scare vascular plants feature.

Habitat Feature (BAP Broad Habitat level, or more detailed level if applicable)	Estimated extent (ha) and date of data source/estimate	Site Specific Target range and Measures	Comments
Standing open water and canals (ditch system)	The SSSI feature comprises both the Counter Drain/Old Bedford River (outer river) and the Old Bedford/River Delph (inner river) which are both circa 30km from Earith to Welmore Sluice. Hence the total extent target is 60km. The SAC feature comprises both the Counter Drain/Old Bedford river (outer river) and the Old Bedford/River Delph (inner river) and was measured at 311ha at time of notification.	No reduction in channel length of the two main parallel drainage channels. During the structured walk, note any changes caused by active management, such as infilling or channel diversion. No change in extent of Spined Loach habitat, 311 ha	The system of main drainage channels is very unlikely to change over time as they are managed and maintained as part of the pump-drained agricultural Middle Level (outer river) and as an integral part of the artificial washland flood storage system (inner river). Note that the extent of the freshwater system in the Old Bedford/River Delph reaches as far as Welmore sluice at the northern end of the Washes and this sluice prevents saline water incursion into the freshwater system. These observations do not include drying out or successional change, which are covered under other attributes.

Audit Trail
Rationale for habitat extent attribute (Include methods of estimation (measures), and the approximate degree of change which these are capable of detecting).
1900ha of internal washland grassland estimated by deduction (using GIS) of area of rivers, Counter Drain and barrier bank improved grassland from which are not generally used by breeding or wintering birds, except during times of highest water levels when the barrier banks may be temporarily utilised. The figure includes the internal drainage ditch system and areas of open water, which are an integral part of the mosaic of wetland habitats used by birds and are the habitat where the feature, assemblage of rare and scarce vascular plants, generally occur. 1900ha was also used during the calculations of habitat requirement for the off-site Ouse Washes Habitat Creation Project. 311ha of Standing Open Water and Canals and SAC feature taken from the Register of European Sites, 14 June 2005 MG11/MG13 mosaic extent estimated from Prosser M.V. and Wallace H.L., January 2002: *Vegetation Change on the Ouse Washes, 1972-2001*. Report for English Nature, RSPB and WWT. The internal system of drainage ditches is not included as a specific feature as the Criteria Sheet specifies the 2 parallel main drainage channels as the notified feature. However, to assess the Vascular Plant Assemblage feature, which includes aquatic species, a ditch survey will be required including a sample of the internal ditch system.
Rationale for site-specific targets (including any variations from generic guidance)
Other Notes
A Further area of new wet grassland habitat is in creation as part of the off-site Ouse Habitat Creation Project. This is due for completion in 2014. This will provide a new habitat and help reduce past declines of bird species in the area. In light of this, descriptions, targets, attributes and measures throughout this document will have to be reviewed. Other surrounding lowland grasslands and gravel pit sites are also hosting breeding and non-breeding bird populations. These at time of writing are under review (as part of the Detailed Notification Review process) as to whether they should be included as part of the Ouse Washes SSSI complex.

Table 2a Species population objectives

Population balance	To maintain the designated species in favourable condition, which is defined in part in relation to their population attributes. Favourable condition is defined at this site in terms of the following site-specific standards.
	On this site favourable condition requires the maintenance of the population of each designated species or assemblage. Maintenance implies restoration if evidence from condition assessment suggests a reduction in size of population or assemblage.

Species Feature (species or assemblage)	**List supporting BAP Broad Habitats**	**Population Attribute (eg presence/absence, population size or assemblage score)**	**Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)**	**Comments**
Aggregation of breeding species: Gadwall	Lowland neutral grassland Standing open water and canals	Bird population size: the site regularly supports a minimum of 111 pairs (SPA, 1992 citation)	Using the 'generic threshold' approach, maintain the population size at a minimum of 76% of the baseline value i.e. 84 pairs. Less than a 25% decrease is an acceptable fluctuation.	The site supported a mean value of 74 pairs (1976, 77, 79-81) and the baseline value of 111 pairs (SPA designation 1992) is selected based upon the population increase in line with national trends since the 1980s. Data are provided annually via RSPB and WWT breeding bird surveys.
Aggregation of breeding species: Mallard	Lowland neutral grassland Standing open water and canals	Bird population size: the site supports a mean value of 1273 pairs (1976, 77, 79-81)	Using the 'generic threshold' approach, maintain the population size at a minimum of 76% of the baseline value i.e. 967 pairs. Less than a 25% decrease is an acceptable fluctuation.	A baseline figure of 850 pairs was present at the time of SPA designation in 1992. Data are provided annually via RSPB and WWT breeding bird surveys.

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Aggregation of breeding species: Garganey	Lowland neutral grassland Standing open water and canals	Bird population size: the site supports a mean value of 9 pairs (1975-1982)	Using the 'generic threshold' approach, maintain the population size at a minimum of 76% of the baseline value i.e. 7 pairs. Less than a 25% decrease is an acceptable fluctuation.	A baseline figure of 14 pairs was present at the time of SPA designation in 1992. Data are provided annually via RSPB and WWT breeding bird surveys.
Aggregation of breeding species: Shoveler	Lowland neutral grassland Standing open water and canals	Bird population size: the site supports a mean value of 248 pairs (1976, 77, 79-81)	Using the 'generic threshold' approach, maintain the population size at a minimum of 76% of the baseline value i.e. 188 pairs. Less than a 25% decrease is an acceptable fluctuation.	A baseline figure of 155 pairs was present at the time of SPA designation in 1992. Data are provided annually via RSPB and WWT breeding bird surveys.
Aggregation of breeding species: Ruff	Lowland neutral grassland	Bird population size: the site supports at mean value of 5 'breeding pairs' (1975-1982)	Using the 'generic threshold' approach, maintain the population size at a minimum of 76% of the baseline value i.e. 4 pairs. Less than a 25% decrease is an acceptable fluctuation.	A baseline figure of 57 lekking males was present at the time of SPA designation in 1992. If present, data would be provided annually via RSPB and WWT breeding bird surveys. The count unit is lekking males rather than 'breeding pairs'. This species is now locally extinct on the Ouse Washes as a breeding species.

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Aggregation of breeding species: Black-tailed Godwit	Lowland neutral grassland	Bird population size: the site supports a mean value of 45 pairs (1975-1982)	Using the 'generic threshold' approach, maintain the population size at a minimum of 76% of the baseline value i.e. 34 pairs. Less than a 25% decrease is an acceptable fluctuation.	A baseline figure of 26 pairs was present at the time of SPA designation in 1992. Data are provided annually via RSPB and WWT breeding bird surveys. This species is now close to local extinction with 3 pairs present in 2008, all nests failed due to a flood event and predation.
Aggregation of breeding species: Spotted Crake	Lowland neutral grassland Standing open water and canals	Bird population size: the site supports 3 individuals	Maintain the population at 3-4 males minimum	Baseline figure and minimum population figure derived from SPA Review (2001) citation. Not on original SPA 1992 citation. Surveys of calling males are carried out between sunset and 2am. Breeding is difficult to detect and all singing males should be regarded as indicative of breeding. Data are provided annually via RSPB and WWT breeding bird surveys and the Rare Breeding Birds Panel reports.

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Assemblage of breeding bird species (Lowland Damp Grasslands)	Lowland neutral grassland	Baseline assemblage species and scores (in parentheses) are as follows: Mute Swan (3), Shelduck (2), Gadwall (4), Teal (3), Pintail (5), Garganey (5), Shoveler (4), Lapwing (1), Ruff (5), Snipe (2), Black-tailed Godwit (5), Redshank (2), Cuckoo (2) Yellow Wagtail (1), Sedge Warbler (1), Reed Bunting (1) **Total score = 46** (Note: BTO Index threshold score = 16)	Record presence / absence of breeding species within the assemblage one year during every six year reporting cycle. Breeding must be confirmed as proven or probable according to generic proof of breeding (refer to Appendix 1of the CSM Birds Guidance, August 2004, page 31). A count of the number or density of breeding pairs / units in a site is not needed. On the basis of presence / absence recalculate the assemblage score using the SSSI Guidelines for the 'Lowland Damp Grasslands' assemblage. The species present at designation and each monitoring event do not need to be the same as this is a score based assessment only. If the total score calculated for a breeding bird assemblage falls by the equivalent of 25% or more in points then the assemblage is in unfavourable condition. A minimum threshold of 35 therefore applies.	The assemblage score is based on a whole site basis, rather than for individual SSSI Units. Assessment of this assemblage feature will therefore need to be at whole site level. Monitoring methods must include observations and assessment of proven, probable or possible breeding using generic BTO codes. The Ouse Washes is the most important site for breeding Snipe in lowland England with a mean value of 517 drumming males present (1976, 77, 79-81). Data should therefore be obtained from RSPB and WWT and included as an additional (but discretionary) part of the assessment of this breeding assemblage. Drumming males should also be recorded in other Units not covered by the NGOs.

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Aggregation of non-breeding species: Mute Swan	Lowland neutral grassland Standing open water and canals	Bird population size: the site supports a five year minimum population of 318 individuals (WeBS counts 1978/79 to 1982/83).	Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Data are provided annually via WeBS. A baseline figure of 490 individuals was present at the time of SPA designation in 1992 (as part of the waterfowl assemblage)
Aggregation of breeding species: Bewick's Swan	Lowland neutral grassland	Bird population size: the site supports a five year peak mean of 5,093 individuals (roost counts reported in WeBS winters of 1997/98 to 2001/02)	Using the 'generic threshold' approach, maintain the population size at a minimum of 51% of the baseline value i.e. 2597 individuals. Less than a 50% decrease is an acceptable fluctuation.	Data are provided annually via WeBS dawn and/or dusk roost counts. Ensure that roost count data are used to assess this feature. The method of counting at the time of notification was not via dawn/dusk roost counts, but this is when peak numbers now use the Ouse Washes. In recent years, this species has predominantly used the Ouse Washes as a roost site, with grazing mainly outside the designated site on surrounding agricultural land. A baseline figure of 4,980 individuals was present at the time of SPA designation in 1992. The methodology by which this figure was derived is not known.

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Aggregation of non-breeding species: Whooper Swan	Lowland neutral grassland	Bird population size: the site supports a five year mean peak of 1,947 individuals (roost counts reported in WeBS winters of 1997/98 to 2001/02)	Using the 'generic threshold' approach, maintain the population size at a minimum of 51% of the baseline value i.e. 993 individuals. Less than a 50% decrease is an acceptable fluctuation.	Data are provided annually via WeBS dawn and/or dusk roost counts. Ensure that roost count data are used to assess this feature. The method of counting at the time of notification was not via dawn/dusk roost counts, but this is when peak numbers now use the Ouse Washes. In recent years, this species has predominantly used the Ouse Washes as a roost site, with grazing mainly outside the designated site on surrounding agricultural land. A baseline figure of 590 individuals was present at the time of SPA designation in 1992. The methodology by which this figure was derived is not known.

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Aggregation of non-breeding species: Wigeon	Lowland neutral grassland (shallow flooded grassland)	Bird population size: the site supports a five year minimum population of 17,684 individuals (WeBS counts 1978/79 to 1982/83).	Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Data are provided annually via WeBS counts. A baseline figure of 38,000 individuals was present at the time of SPA designation in 1992 (as part of the waterfowl assemblage).
Aggregation of non-breeding species: Gadwall	Lowland neutral grassland (shallow flooded grassland)	Bird population size: the site supports a minimum of 268 individuals Minimum peak count across the most recent ten years data are available (2001/02 to 2008/09) (See audit trail)	Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Data are provided annually via WeBS counts. A baseline figure of 320 individuals was present at the time of SPA designation in 1992 (as part of the waterfowl assemblage). 342 individuals representing at least 1.1% of the wintering Northwestern Europe population - 5 year peak mean 1991/2 - 1995/6

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Aggregation of breeding species: Teal	Lowland neutral grassland (shallow flooded grassland)	Bird population size: the site supports a mean peak of 2,651 individuals (WeBS 5YPM 1978/79 to 1982/83).	Using the 'generic threshold' approach, maintain the population size at a minimum of 51% of the baseline value i.e. 1352 individuals. Less than a 50% decrease is an acceptable fluctuation.	Data are provided annually via WeBS counts. A baseline figure of 4,100 individuals was present at the time of SPA designation in 1992 (as part of the waterfowl assemblage)
Aggregation of breeding species: Mallard	Lowland neutral grassland (shallow flooded grassland)	Bird population size: the site supports a mean peak of 4,522 individuals (WeBS 5YPM 1978/79 to 1982/83).	Using the 'generic threshold' approach, maintain the population size at a minimum of 51% of the baseline value i.e. 2306 individuals. Less than a 50% decrease is an acceptable fluctuation.	Data are provided annually via WeBS counts.
Aggregation of non-breeding species: Pintail	Lowland neutral grassland (shallow flooded grassland)	Bird population size: the site supports a five year minimum of 598 individuals (WeBS Ccounts 1978/79 to 1982/83).	Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Data are provided annually via WeBS counts. A baseline figure of 1,450 individuals was present at the time of SPA designation in 1992 (as part of the waterfowl assemblage)

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Aggregation of non-breeding species: Shoveler	Lowland neutral grassland (shallow flooded grassland)	Bird population size: the site supports a five year minimum of 206 individuals (WeBS counts 1978/79 to 1982/83).	Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Data are provided annually via WeBS counts. A baseline figure of 750 individuals was present at the time of SPA designation in 1992 (as part of the waterfowl assemblage)

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Aggregation of non-breeding species: Pochard	Lowland neutral grassland (deeper areas of flooded grassland)	Bird population size: the site supports a five year minimum of 1203 individuals (WeBS counts 1978/79 to 1982/83).	Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Data are provided annually via WeBS counts. A baseline figure of 2,100 individuals was present at the time of SPA designation in 1992 (as part of the waterfowl assemblage)
Aggregation of non-breeding species: Tufted Duck	Lowland neutral grassland (deeper areas of flooded grassland)	Bird population size: the site supports a five year minimum of 352 individuals (WeBS counts 1978/79 to 1982/83).	Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Data are provided annually via WeBS counts. A baseline figure of 860 individuals was present at the time of SPA designation in 1992 (as part of the waterfowl assemblage)
Aggregation of non-breeding species: Hen Harrier	Lowland neutral grassland	Bird population size: the site supports a mean value of 12 individuals (1982-1987)	Using the 'generic threshold' approach, maintain the population size at a minimum of 51% of the baseline value i.e. 6 individuals. Less than a 50% decrease is an acceptable fluctuation.	Although not strictly a WeBS species, recorders on the Ouse Washes also count other species during WeBS counts, including all raptors, so annual data are available. Hen Harrier is not a SSSI feature

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Aggregation of non-breeding species: Coot	Lowland neutral grassland (deeper areas of flooded grassland)	Bird population size: the site supports a mean peak of 1757 individuals (WeBS counts1982/83 to 1986/87)	Based on the known natural fluctuations of the population in the site, maintain the population at or above the minimum for the site.	Data are provided annually via WeBS counts. A baseline figure of 2,320 individuals was present at the time of SPA designation in 1992 (as part of the waterfowl assemblage)
Aggregation of non-breeding species: Ruff	Lowland neutral grassland	Bird population size: the site supports a mean peak of 137 individuals (5YPM 1991/92 – 1995/96)	Using the 'generic threshold' approach, maintain the population size at a minimum of 51% of the baseline value i.e. 70 individuals. Less than a 50% decrease is an acceptable fluctuation.	Baseline figure derived from SPA Review (2001) citation. Not listed on original SPA (1992) citation.

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Aggregation of non-breeding species: Black-tailed Godwit	Lowland neutral grassland	Bird population size: the site supports a mean peak of 1,198 individuals (5YPM 1991/92 – 1995/96)	Using the 'generic threshold' approach, maintain the population size at a minimum of 51% of the baseline value i.e. 611 individuals. Less than a 50% decrease is an acceptable fluctuation.	Baseline figure derived from SPA Review (2001) citation. Not listed on original SPA (1992) citation. Wintering and Spring passage biogeographic population (*Limosa limosa icelandica*) is different to that breeding (*L.l. limosa*)

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Variety of Species	Lowland neutral grassland Standing open water and canals	Number of species (diversity) in the assemblage of wintering bird species. The SSSI guidelines threshold value of 90 applies as a baseline.	Record presence/absence of all species (not just waterbirds) within the site during the relevant period. If the number of wintering species falls below the threshold value of 90 then the feature is in Unfavourable condition (Winter = November to February)	Some data are provided annually via WeBS data. Note that WeBS methodology does not require the recording of all species but WeBS counters will often record other species as well as waterbirds. Data may also be available from Cambs County Bird Reports and RSPB, WWT local site records. Reliable data are not available from the period before renotification to set a meaningful baseline.
Variety of Species	Lowland neutral grassland Standing open water and canals	Number of species in the assemblage of breeding bird species. The SSSI guidelines threshold value of 65 applies as a baseline.	Record presence/absence of breeding species within the site. Methods of survey will depend on the species recorded. Breeding must be confirmed as proven or probable according to generic proof of breeding codes. A count of the numbers of breeding pairs/units in a site is not needed. If the number of breeding species falls below the threshold value of 65 then the feature is in Unfavourable condition.	Data on rare and common species will be needed. Data may be available via annual RSPB and WWT breeding bird surveys but note that these may not record all the common species breeding on the site and do not cover the whole site. Data may also be available from Cambs County Bird Reports. Reliable data are not available from the period before renotification to set a meaningful baseline.

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Wintering waterfowl numbers (SPA and Ramsar feature)	Lowland neutral grassland Standing open water and canals	Sum of the numbers of all species in the wintering waterfowl community. A mean peak count of 60,950 individuals was recorded over the winters of 1986/87 to 1990/91.	Maintain wintering waterfowl community size within acceptable limits. A five year peak mean value of 60,950 individuals should be maintained.	Data are provided annually via WeBS counts. The 'Wintering waterfowl' community is now referred to as 'waterbirds' and refers to all species using the wetland habitat. This community includes the following groups and species: swans, geese, ducks, rails, herons, cormorants, Kingfisher and relevant raptors e.g. Marsh Harrier.

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Assemblage of nationally rare and scarce vascular plants: Fringed Water-lily *Nymphoides peltata* (nationally scarce)	Standing open water and canals	Presence/absence	Maintain populations of Fringed Water-lily (aquatic ditch species) (assemblage score 50) at a minimum viable population size AND no more than 20% loss in positive sampling frequency from the baseline of 1978 (see comments) Record presence between July and September in the 'Outer River' and 'Inner River'. This species may also have moved to newer permanent waterbodies such as pools and ponds that have appeared due to increased flooding events.	The 1978 Ditch and River Survey (Cadbury *et al*, 1993, full reference in audit trail below) recorded this species in 64% of samples in the Outer River (Counter Drain/Old Bedford) and 87% of those on the Inner River (River Delph/Old Bedford). The large drains or 'rivers' referred to above were not re-surveyed in 1992. This species is mainly restricted to the 'rivers' noted above and was only recorded in 0.6% of the internal drainage ditches surveyed in 1992, all close to the Inner River. This species may also have moved to newer permanent waterbodies such as pools and ponds that have appeared due to increased flooding events.

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Assemblage of nationally rare and scarce vascular plants: Narrow-leaved Water-dropwort *Oenanthe silaifolia* (nationally scarce)	Lowland neutral grassland	Presence/absence	Maintain populations of Narrow-leaved Water-dropwort (neutral grassland species) (assemblage score 50) AND no more than 50% loss in the 273 plants recorded in 1993 (see comments). Record and map presence and count individual plants at the previously recorded location and any other Washes that are cut for hay. Record and map between May and August, before the hay cut.	In 1972, *a small number of plants* was recorded in 2 fields (washes) NE of Mepal at TL455826 (J Cadbury). In May 1993, at the same location, there were 273 plants recorded from the wash known as '92a Darby's' and a few more in the adjacent washes. This was thought to be the result of a lower intensity of mowing and grazing the preceeding summer due to a flood event. This species was not recorded across the 8 transects of the 2001 vegetation survey (Prosser and Wallace, 2001) and the repeat survey of the 8 transects in 2008 (Graham, 2008)

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Assemblage of nationally rare and scarce vascular plants: Greater Water Parsnip *Sium latifolium* (nationally scarce)	Standing open water and canals Lowland neutral grassland	Presence/absence	Maintain populations of Greater Water Parsnip (emergent species found close to ditches and pools) at a minimum viable population size, at the known locations from the 1992 survey. Establish more accurately population size by counting plants at the known main location. Survey work between July and September.	There was evidence of spread between the 1978 Ditch and River Survey and the 1992 survey. In 1992 there were *several hundred plants* recorded close to the Pymoor Railway Viaduct and distribution maps are available in Cadbury *et al*, 1993, Figure 34. Flood events may be responsible for the apparent spread between 1978 and 1992, but there is no more recent data available to corroborate this. Greater Water Parsnip is a UK Priority Biodiversity Action Plan (BAP) species.
Assemblage of nationally rare and scarce vascular plants: Marsh Sow-thistle *Sonchus palustris* (nationally scarce)	Standing open water and canals Lowland neutral grassland	Presence/absence	Maintain populations of Marsh Sow-thistle (emergent species found in or at edges of rivers and ditches or in fen) at a minimum viable population size, at the known locations (see comments). Establish more accurately population size by counting plants at the known main location. Survey work between July and September.	Recorded on a berm on the high part of the South Level Barrier Bank, adjacent to the New Bedford River (Hundred Foot River) at TL520907 in 1989 and 1990. 197 flower stems present in 1990. In 1992, 40 flower stems present after large-scale works to the barrier bank. (www.cambridgeshireflora.com)

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Assemblage of nationally rare and scarce vascular plants: Greater Dodder *Cuscuta europaea* (nationally scarce)	Standing open water and canals Lowland neutral grassland	Presence/absence Niche availability Soils and hydrology Negative indicators: physical damage	Species should be present. Survey when flowering in late summer (Aug-Sep) and look for the main host plant; Common Nettle *Urtica dioica* . No loss in extent of area of ditch-side nettle beds at the known locations. Baseline data is not currently available as to the extent of the nettle beds (and extent of the Greater Dodder). Extent will therefore need to be determined and mapped in the field, initially using the known locations listed on www.cambridgeshireflora.com. (for examples, see comments) Dampness present at soil surface throughout the winter. Nitrophilous conditions present, characterised by lush vegetation and dominant nettles. To be measured by visual assessment. Absence of herbicide use to be measured by visual assessment.	If all other indirect attributes listed below are met, but the species cannot be located, refer this feature to the Natural England botanical specialists for assessment. Usually associated with stream banks and riverside nettle beds and requires nutrient enriched (nitrophilous) conditions. Recorded locations: between Welches Dam and Mepal at TL459843 on nettles in 1983, east side of River Delph in 1990 at TL472860. Various further locations between 1989 and 1993 e.g. *common along 40m length of old slub by Old Bedford at TL461845* (1993). Requires damp, nutrient enriched soils, intermittently flooded between autumn and spring. Winter floods may aid dispersal. Although unlikely for this site, if the soils become too dry or infertile, this would quickly be displayed by reduced lushness and abundance of the dominant host species. There should be no evidence of herbicide spraying to control its primary hosts.

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Assemblage of nationally rare and scarce vascular plants: Tasteless Water-pepper *Persicaria mitis* (nationally scarce)	Standing open water and canals Lowland neutral grassland	Presence/absence Niche availability Vegetation structure Bare ground	Species should be present at the two known sites from the 1992 survey. Sufficient area of suitable habitat along ditch or pool margins (where marginal muddy conditions are present with some evidence of trampling or poaching). No loss of area of muddy pool or ditch margins at known locations and this area should be mapped. Encroaching vegetation such as nettles, creeping bent or willowherbs to be no more than rare. Measure by visual assessment, using DAFOR scale. >90% of the margins to be open bare mud at the known locations, in early summer before seed germinates. Measure by visual assessment. Survey between July and September (but see need to assess open bare mud in early summer)	The 1992 survey recorded this species at two sites: both close to the banks of the River Delph; one at Welches Dam (TL471860) and one at a ditch bank site between Welches Dam and the Pymoor Railway Viaduct (TL513914). Distribution map is available in Cadbury *et al*, 1993, Figure 54. The development of thick marginal vegetation indicates Unfavourable condition. Grazing animals such as cattle or ponies, with access to margins, will inhibit competing vegetation and expose the seed bank.

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Assemblage of nationally rare and scarce vascular plants: Ribbon-leaved Water-plantain *Alisma gramineum* (Schedule 8)	Standing open water and canals	Presence/absence Niche availability Vegetation structure Bare ground	Species should be present. Sufficient area of suitable habitat along ditch or pool margins (where marginal muddy conditions are present). No loss of area of muddy pool or ditch margins and this area should be mapped. Encroaching vegetation such as nettles, creeping bent or willowherbs to be no more than rare. Measure by visual assessment, using DAFOR scale. >90% of the margins to be open bare mud in appropriate locations, in early summer before seed germinates. Measure by visual assessment.	This species is transient and sporadic in its occurrence. Records are sparse for the Ouse Washes, but it is thought to have been present at or near the site in the past. If all other indirect attributes listed below are met, but the species cannot be located, refer this feature to the Natural England botanical specialists for assessment. Range of conditions from wet (sometimes inundated) mud to dry (or damp) marginal mud should be preserved. Needs to be minimal or absent. The development of thick marginal (or sublittoral) vegetation indicates Unfavourable condition. Grazing animals such as cattle or ponies, with access to margins, will inhibit competing vegetation and expose the seed bank. Ribbon-leaved Water-plantain is a UK Priority Biodiversity Action Plan (BAP) species.

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Assemblage of nationally rare and scare vascular plants	Standing open water and canals Lowland neutral grassland	Baseline assemblage species and scores (in parentheses) are as follows: Fringed Water-lily (50), Narrow-leaved Water-dropwort (50), Tasteless Water-pepper (50), Greater Water Parsnip (50), Greater Dodder (50), Marsh Sow-thistle (50) and Ribbon-leaved Water-plantain (200) **Total = 500**	Maintain complete assemblage species and score of 500	Other species listed on the Criteria Sheet that qualified at the time of notification but do not score under the new SSSI vascular plant guidelines (Feb 2004) are as follows: Needle Spike-rush *Eleocharis acicularis*, Whorled Water Milfoil *Myriophyllum verticillatum*, Mousetail *Myosurus minimus*, River Water Dropwort *Oenanthe fluviatilis*, Least Water-pepper *Persicaria minor*, Long-stalked Pondweed *Potamogeton praelongus*, Hairlike Pondweed *Potamogeton trichoides*, Golden Dock *Rumex maritimus*, Marsh Dock *Rumex palustris*. Further species appear on the Citation: Fan-leaved Water Crowfoot *Ranunculus circinatus*, Arrow-head *Sagittaria sagittifolia*, Perfoliate Pondweed *Potamogeton perfoliatus*. During monitoring for presence and absence of the qualifying species of the assemblage, the above species should also be recorded but not form part of the assessed assemblage score. Some of these species may also be recorded via the assessment of the ditch feature (see Table 3d)

Species Feature (species or assemblage)	List supporting BAP Broad Habitats	Population Attribute (eg presence/absence, population size or assemblage score)	Site Specific Target range and Measures (specify geographical range over which target applies ie site, BAP broad habitat or more specific)	Comments
Spined Loach	Standing open water and canals	Adult population densities: baseline densities were 0.52 individuals m-2 and 0.15 individuals m-2 in outer and inner rivers respectively (2000)	There should be no reduction in densities from existing levels, and in any case no less than 0.1 m-2	Data can be gathered via electrofishing in rivers and hand trawl in drains. Routine Environment Agency monitoring is not capable of providing suitable data. A least-cost methodology for monitoring this attribute is being investigated, involving the sampling of representative reaches within an SAC.

Audit Trail
Rationale for species population attributes (Include methods of estimation (measures) and the approximate degree of change which these are capable of detecting).
Spined Loach population estimates (baseline adult densities) taken from *Spined Loach Cobitis taenia survey in the Ouse Washes cSAC*, Perrow M.R. and Tomlinson M.L., ECON, report for English Nature, December 2001. Breeding bird population baseline estimates in original Version 1.0 taken from *Summary of Breeding Bird Data 1975-1998*, RSPB report to English Nature. An exception is for Gadwall, where the baseline value of 111 pairs (SPA designation 1992) is selected based upon the population increase in line with national trends since the 1980s. Breeding bird population baseline estimates in Version 1.1 derived from summing data from both RSPB and WWT. Hen Harrier is not a SSSI feature and so the baseline is taken from the SPA citation. Bewick's Swan and Whooper Swan baseline data: these were taken from WeBS annual reports for the first available five-year period when roost counts were routinely used and reported as a method of counting these species. For Bewick's Swan this was the winters of 1999/00 to 2003/04 and for Whooper Swan 1998/99 to 2002/03. References for the baseline data for the assemblage of nationally rare and scarce vascular plants attribute: Cadbury C.J., Halshaw L. and Tidswell R. *Status and management of the ditch and pool flora of the Ouse Washes, 1992: comparisons with 1978*. April 1993, jointly published by English Nature (Peterborough), Royal Society for the Protection of Birds (Sandy), Wildfowl and Wetlands Trust (Slimbridge). Graham J. *A repeat transect vegetation survey of the Ouse Washes – a report for the Environment Agency, Central Area, Anglian Region*. 19 September 2008 (draft) Prosser M.V. and Wallace H.L. *Vegetation change on the Ouse Washes 1972-2001*. January 2002, jointly published by English Nature, Royal Society for the Protection of Birds, Wildfowl and Wetlands Trust

Wintering bird population baseline data are derived from known natural fluctuations based on the minimum count of individual species from five years of WeBS data from 1978/79 to 1982/83 (the five winters preceeding renotification in 1983) for the majority of species. An exception is for Coot where WeBS data are not available until 1982/83 for this site.

Another exception is for wintering gadwall numbers. Wintering gadwall within the UK have increased steadily over the past 3 decades; considered to be in response to milder winters, better site protection and an increase in habitat availability (e.g. gravel pits). Over the ten years to 2008/09, the national population increased by 27% and over the long term (1983/84 to 2008/09) it increased by 312% (Eaton *et al.* 2012). It appears the rate of increase is slowing. It is unlikely therefore, that a baseline derived from data in the late 70s and early 80s continues to represent 'Favourable' condition adequately. On the Ouse Washes, this national increase has been mirrored with a 6725% increase over 10 years (to 2009/10) and a long term (25 years to 2009/10) increase of 340% (Cook *et al.* 2013). Peak counts at this site since the late 90s show a large amount of variability from year to year, hence the 'natural fluctuations' are large and more difficult to identify. The fluctuations are likely to be in response to winter water levels on the Washes. During some winters, the water is too deep over a prolonged period for this 'dabbling' duck species. The lowest peak count of 268 from this period is selected as a minimum threshold (following the 'known natural fluctuations' approach in CSM guidance) to represent 'Favourable' condition for this population on the Ouse Washes. This value will take into account the years when high rainfall is such that water levels are not optimal for this dabbling duck species. Baseline ammendment to Gadwall numbers was approved by Dr. Tim Hill (Natural England) on 17/10/2013.

References: Cook A.S.C.P., Barimore C., Holt C.A., Read W.J. & Austin G.E. (2013) *Wetland Bird Survey Alerts 2009/2010: Changes in numbers of wintering waterbirds in the Constituent Countries of the United Kingdom, Special Protection Areas (SPAs) and Sites of Special Scientific Interest (SSSIs)*. BTO Research Report 641. BTO, Thetford. http://www.bto.org/webs-alerts

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Rationale for site-specific targets (including any variations from generic guidance)
Other Notes

Table 3a Site specific Habitat/geological condition objectives (Mosaic of MG11/MG13 GRASSLAND)

To maintain the **Lowland Neutral Grassland** at **Ouse Washes** in favourable condition, with particular reference to relevant specific designated interest features. Favourable condition is defined at this site in terms of the following site-specific standards:
Site-specific details of any geographical variation or limitations (where the favourable condition standards apply)

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
MG11-related MG13-related; Inland wet grassland, *Agrostis-Carex* grassland,	Sward structure: bare ground	Record extent of bare ground (not rock) distributed through the sward, visible without disturbing the vegetation e.g. from the seasonal effects of flooding. Record in period May - July (before hay cut in meadows). Also record sometimes in aftermath grazing period in hay meadows.	No more than 15% in May-early June or no more than 10% in mid-June-July	Outside target indicates problems with stock management eg poaching, supplementary feeding or excessive flooding.	No
MG11-related MG13-related; Inland wet grassland, *Agrostis-Carex* grassland,	Sward structure: litter	Record cover of litter where in a more or less continuous layer, distributed either in patches or in one larger area. Record in period May - July (before hay cut in meadows). Also record sometimes in aftermath grazing period in hay meadows.	Total extent no more than 25% of the sward	Outside target indicates biomass removal is insufficient eg lack of or insufficient grazing or not cut for hay.	No

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
MG11-related MG13-related; Inland wet grassland, *Agrostis-Carex* grassland,	Sward structure: average height	Record sward height in period May - July (before hay cut in meadows). Upper target refers to pastures only.	Sward 5 - 15 cm (excluding Juncus spp.)	Sward height above upper target shows that habitat is not being managed sufficiently eg lack of or insufficient grazing or if below lower target, is being overgrazed.	No
MG11-related MG13-related; Inland wet grassland, *Agrostis- Carex* grassland	Sward composition: Positive indicator species	Record the frequency of positive indicator species from the list below to give an overall total of 2 frequent and 2 occasional or locally abundant Record in period May - July (before hay cut in meadows). *Achillea ptarmica, Caltha palustris,Cardamine pratensis, Eleocharis* spp., *Filipendula ulmaria, Galium palustre/G. uliginosum, Juncus acutiflorus/ J. articulatus/ J. subnodulosus* (jointed rushes), *Leontodon autumnalis, Lychnis flos-cuculi, Lysimachia nummularia, Mentha aquatica, Myosotis laxa cespitosa/M. scorpioides, Oenanthe fistulosa, Persicaria amphibia, Ranunculus flammula*, small blue-green *Carex* spp. (leaves less than 5mm wide) (*C. flacca, C.nigra, C.panicea*), *Thalictrum flavum*.	Overall total of at least two species/taxa frequent plus at least two species/taxa occasional throughout the sward or locally abundant in more than 10% of the sward	Choice of species related to grassland types, restriction to unimproved grassland and wetness characteristics of habitat, all satisfactory when inside target. Among possible species that could be used, choice further restricted by ease of identification, visibility in recording period.	Yes

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
MG11-related MG13-related; Inland wet grassland, *Agrostis-Carex* grassland,	Sward composition: indicators of waterlogging	Record % cover of *Juncus* spp, *Deschampsia cespitosa*, large (leaves more than 5mm wide)*Carex* spp. (eg *Carex acutiformis*), large grasses (leaves more than 10mm wide, stout stems) i.e. *Glyceria maxima*, *Phalaris arundinacea*, *Phragmites australis*. Record in period May - July (before hay cut in meadows).	No species/taxa together or singly covering more than 25% of the sward	Species chosen to indicate waterlogging problems when outside target eg from raised water tables.	Yes
MG11-related MG13-related; Inland wet grassland, *Agrostis-Carex* grassland,	Sward composition: negative indicator species.	Record the frequency and % cover of negative indicator species. Record in period May - July (before hay cut in meadows). *Senecio aquaticus*	No more than occasional throughout the sward or more than 5% cover	Outside target can discourage hay/grazing management because the species is toxic to livestock, and is palatable when dry.	Yes
MG11-related MG13-related; Inland wet grassland, *Agrostis-Carex* grassland,	Sward composition: negative indicator species	Record the frequency and % cover of negative indicator species. Record in period May - July (before hay cut in meadows). *Cirsium arvense, Cirsium vulgare, Rumex crispus, Rumex obtusifolius,Urtica dioica*.	No species more than occasional throughout the sward or singly or together more than 5% cover	Invasive species chosen toindicate problems of eutrophication and disturbance from various sources when outside target e.g. poaching, stock feeding.	Yes

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
MG11-related MG13-related; inland wet grassland, *Agrostis-Carex* grassland	Sward composition: negative indicator species	Record the % cover of negative indicator species in period May - July (before hay cut in meadows). All tree and scrub species, considered together. N.b. If scrub/tree species in pastures are more than occasional throughout the sward but less than 5% cover, they are soon likely to become a problem if grazing levels are not sufficient or if scrub control is not being carried out.	No more than 5% cover.	Invasive species outside target shows that habitat is not being managed sufficiently e.g. lack of insufficient grazing/cutting	Yes

Audit Trail
Rationale for limiting standards to specified parts of the site
Rationale for site-specific targets (including any variations from generic guidance)
Rationale for selection of measures of condition (features and attributes for use in condition assessment) (The selected vegetation attributes are those considered to most economically define favourable condition at this site for the broad habitat type and any dependent designated species).
Other Notes

Table 3b Site specific Habitat/geological condition objectives (discretionary attributes for birds)

To maintain the **Lowland Neutral Grassland** at **Ouse Washes** in favourable condition, with particular reference to relevant specific designated interest features. Favourable condition is defined at this site in terms of the following site-specific standards:
Site-specific details of any geographical variation or limitations (where the favourable condition standards apply)

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
Aggregation of breeding species: Gadwall	Vegetation structure Food availability Hydrology	Suitable nesting habitat of emergent vegetation or low scrub on the edges of shallow, eutrophic waterbodies. Presence of soft-leaved and aquatic plants Presence of aquatic invertebrates: hatching midges Dropping water levels providing a succession of surface water areas for feeding Water depth: shallow water for feeding	Maintain extent of suitable nesting habitat. Optimum conditions are several patches of vegetation between 20-60cm tall less than 50m from water. No reduction in availability especially: *Glyceria fluitans*, *Agrostis stolonifera*, *Chara* spp., *Potomogeton* spp., *Ceratopyllum* spp. No reduction in availability of hatching midges Water levels falling by 5-15% per month from the time of mean hatch date Water depth of <25cm over more than 50% of feeding area		No

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
Aggregation of breeding species: Mallard	Vegetation structure	Suitable nesting habitat that exists in a wide range of freshwater wetland habitats including narrow drainage ditches	Maintain extent of suitable nesting habitat		No
Aggregation of breeding species: Garganey	Vegetation structure	Suitable nesting habitat of lowland wet grassland, marsh, fen or grassland with intersecting ditches often edged with *Phragmites* reed.	Maintain extent of suitable nesting habitat		No
Aggregation of breeding species: Shoveler	Vegetation structure Food availability Hydrology	Suitable nesting habitat with plentiful emergent and marginal vegetation including reeds. Presence of aquatic plants Presence of aquatic invertebrates inc. hatching midges Wet fields with many surface pools, ditches or channels Dropping water levels providing a succession of surface water areas for feeding Water depth: shallow water for feeding	Maintain extent of suitable nesting habitat No reduction in availability especially: *Scirpus* spp., *Eleocharis* spp., *Carex* spp., *Potomogeton* spp., *Glyceria* spp. No reduction of availability of *Hydrobia*, crustaceans, caddisflies, *diptera* and beetles and hatching midges. 20-30% of the area flooded or soggy Water levels falling by 5-15% per month from the time of mean hatch date Water depth of <30cm over more than 50% of feeding area		No

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
Aggregation of breeding species: Ruff	Landscape Landform Vegetation structure Food Availability Hydrology Grazing animals	Open terrain, relatively free from obstructions (anti-predator, feeding, roosting) Pools, ditches or channels with shallow gradients (for easy access by feeding chicks) Open, short vegetation or bare ground predominating (roosting or feeding Mix of short and taller, tussocky, wet vegetation (nesting) Presence of soil and ground-surface invertebrates Wet fields with many surface pools, ditches or channels (for feeding) Water depth: shallow water for feeding Low stock densities to reduce	No significant reduction in view lines in feeding and roosting areas. Unrestricted views over 200m and effective field size greater than 10ha No reduction in availability of easy access via shallow gradients to pools, ditches or channels The optimum vegetation structure conditions are vegetation of less than 10cm throughout areas used for roosting and feeding. The optimum vegetation structure conditions are a ratio of 1:1 short (<5cm) to medium/long (>10cm) of vegetation in a mosaic in areas used for nesting. No reduction in availability of Dipteran flies, beetles and earthworms. 20-30% of the area soggy or flooded. Water depth of between 1-3cm over more than 50% of the feeding area		No

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
		Losses to trampling	Stocking density of 0.75 Livestock Units between 01 April and 31 May (as per HLS HK09 prescription)		
Aggregation of breeding species: Black-tailed Godwit	Landscape	Open terrain, relatively free from obstructions (anti-predator, feeding, roosting)	No significant reduction in view lines in feeding and roosting areas. Unrestricted views over 200m and effective field size greater than 10ha		No
	Landform	Pools, ditches or channels with shallow gradients (for easy access by feeding chicks)	No reduction in availability of easy access via shallow gradients to pools, ditches or channels		
	Vegetation structure	Open, short vegetation or bare ground predominating (roosting or feeding)	The optimum vegetation structure conditions are vegetation of less than 10cm throughout areas used for roosting and feeding.		
		Mix of short and taller, tussocky, wet vegetation (nesting)	The optimum vegetation structure conditions are frequent patches of vegetation of 20-30cm tall amongst a shorter sward overall for breeding activity		
			No reduction in availability of earthworms, leatherjackets and chironomids		
			20-30% of the area soggy or flooded		

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
	Food availability Hydrology Grazing animals	Presence of soil and ground-surface invertebrates Wet fields with many surface pools, ditches or channels (for feeding) Low stock densities to reduce losses to trampling (ground nesting)	 Stocking density of 0.75 Livestock Units between 01 April and 31 May (as per HLS HK09 prescription)		
Aggregation of non-breeding species: Bewick's Swan:	Landscape Vegetation characteristics Food availability Hydrology	Open terrain, relatively free from obstructions (feeding, roosting) Open and short vegetation predominating (feeding) Presence of soft-leaved and aquatic plants Wet fields with many surface pools, ditches or channels (for feeding) Fluctuating water levels to provide a succession of water areas for feeding	No significant reduction in view lines in feeding and roosting areas. Unrestricted views over 500m and effective field size greater than 6ha Maintain optimum conditions of vegetation height less than 10cm throughout areas used for feeding. Maintain availability of *Lolium perenne, Glyceria fluitans, Phleum pratense, Rorippa amphibian, Alopecurus geniculatus, Potomogeton* spp*., Ceratophyllum* spp*., Zannichellia* spp*., Myriophyllum* spp*., Chara* spp	Feeding areas are generally outside the SSSI, especially when water levels are too deep (for a substantial proportion of most recent winters water levels are >1m), on potatoes, root crops, winter	No

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
		Water depth – shallow water for feeding Water area – large open areas of standing water for feeding and roosting	Maintain optimum conditions of 25-50% of the area soggy or flooded Maintain optimum conditions of water levels fluctuating by 5-15% per month Maintain optimum conditions of <1m over more than 50% of the feeding area Maintain optimum conditions of at least	Cereals or permanent pasture	
Aggregation of non-breeding species: Whooper Swan	Landscape Vegetation characteristics Food availability Hydrology	Open terrain, relatively free from obstructions (feeding, roosting) Open and short vegetation predominating (feeding) Presence of soft-leaved and aquatic plants Fluctuating water levels to provide a succession of surface water areas for feeding Water depth – shallow water for feeding Water area – large open areas of standing water for feeding and roosting	No significant reduction in view lines in feeding and roosting areas. Unrestricted views over 500m and effective field size greater than 6ha Maintain optimum conditions of vegetation height less than 10cm throughout areas used for feeding Maintain availability of *Lolium perenne, Glyceria fluitans, Phleum pratense, Potomogeton* spp*., Ranunculus* spp*., Chara* spp. Maintain optimum conditions of water levels fluctuating by 5-15% per month Maintain optimum conditions of <1m over more than 50% of the feeding area	Feeding areas are generally outside the SSSI, especially when water levels are too deep (for a substantial proportion of most recent winters water levels are >1m), on potatoes, root crops, winter cereals or permanent pasture	No

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
			Maintain optimum conditions of at least one area of freshwater or saltwater open water > 10ha		
Aggregation of non-breeding species: Wigeon	Landscape Vegetation characteristics Food availability Connectivity	Open terrain, relatively free from obstructions (anti-predators, feeding, roosting) Open and short vegetation predominating (feeding) Presence of soft-leaved plants Pasture for feeding very close to open water for safer roosting away from predators	No significant reduction in view lines in feeding and roosting areas. Unrestricted views over 500m and effective field size greater than 5ha Maintain optimum conditions of vegetation height < 5cm throughout areas used for feeding Maintain availability of *Lolium* spp*., Glyceria* spp*., Agrostis* spp., *Alopecurus* spp. Maintain availability of feeding pasture adjacent to or no more than 50m from open water		No
Aggregations of non-breeding species: other dabbling ducks: Gadwall (GA) , Teal(T.), Mallard (MA), Pintail (PT), Shoveler (SV).	Food availability Hydrology	Presence of soft-leaved and aquatic plants (includes seed bearing plants for Teal) Water depth - shallow water for feeding	Maintain availability of *Carex* spp. (SV) *Eleocharis* spp. (PT, SV, T.), *Glyceria* spp. (MA, PT, SV), *Polygonum* spp. (MA, T.), *Potomogeton* spp. (SV), *Ranunculus* spp. (MA, T.), *Rumex* spp (MA, PT, T.), *Scirpus* spp. (SV) Maintain optimum conditions of <25cm over > 50% of the feeding area (GA). **And** Maintain optimum conditions of <30cm > 50% of the feeding area (MA, PT, SV, T.).		No

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
Aggregations of non-breeding species: Pochard (PO), Tufted Duck (TU) and Coot (CO)	Food availability	Presence of soft-leaved and aquatic plants	Maintain availability of *Chara* spp.(CO, PO, TU), *Cladophora* spp. (CO), *Elodea* spp. (CO), *Nitella* spp. (PO, TU), *Potomogeton* spp. (CO, PO, TU), *Ranunculus* spp. (CO), *Ruppia* spp. (CO)		No
	Hydrology	Water depth - for feeding	Maintain optimum conditions of between 0.5m-2m over >50% of the feeding area (CO) **And** Maintain optimum conditions of between 2m-5m over >50% of the feeding area (PO, TU)		
Audit Trail					
Rationale for limiting standards to specified parts of the site					
Rationale for site-specific targets (including any variations from generic guidance)					
Rationale for selection of measures of condition (features and attributes for use in condition assessment) (The selected vegetation attributes are those considered to most economically define favourable condition at this site for the broad habitat type and any dependent designated species).					
Other Notes					

Table 3c Site specific definition of Favourable Condition (Spined Loach)

To maintain the **Standing Open Water and Canals** at **Ouse Washes** in favourable condition, with particular reference to relevant specific designated interest features. Favourable condition is defined at this site in terms of the following site-specific standards:
Site-specific details of any geographical variation or limitations (where the favourable condition standards apply)

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
Spined Loach	Age structure	Analysis of length frequency distribution from sampling will reveal cohorts.	At least three year-classes should be present at significant densities. At least 50% of the population should consist of 0+ fish		Yes
	River morphology	Assess river morphology using RHS	Maintain the characteristic physical form of the river channel	A natural channel morphology provides the diversity of breeding/nursery habitat, cover from predators, refuge against high flows, and feeding opportunities that best meet the full life cycle requirements of the species. However, note that the Counter Drain and Old Bedford/River Delph are not natural channels. They are drainage channels linked to the Middle Level and Ouse Washes respectively and more akin to Standing Open Water and Canals.	Yes

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
Spined Loach	The Life in UK Rivers project has produced recommendations for assessing siltation in rivers. Quantitative methods are expensive and will be difficult to link to unclear ecological requirements of the species.	Maintain natural substrate character. Maintain vegetation management to no more than 50% of the channel width (for submerged plants) and 50% of the bank length (for marginal fringing plants)	Optimum substrate character should be at least 20% sand and no more than 40% silt. Whilst the species can tolerate silt and mud, it has a preference for sandy substrates. If the organic content becomes too high, reduced oxygen availability near the sediment/water interface may lead to enhanced egg and juvenile mortality. High sediment cohesiveness is likely to affect the feeding process	The Life in UK Rivers project has produced recommendations for assessing siltation in rivers. Quantitative methods are expensive and will be difficult to link to unclear ecological requirements of the species. A mosaic of bare substrate and submerged beds of higher plants provides optimal conditions in relation to feeding, cover from predators and spawning (which occurs on submerged plants). Marginal emergents also provide important cover and feeding opportunities.	Yes
	River morphology	Initial survey then planning consents	No artificial barriers significantly impairing essential fish movement	Free movement within the channel is necessary to ensure maintenance of genetic diversity (and therefore population viability) and to provide the potential for recolonisation of waters that have become artificially denuded of spined loach. New instream structures should be avoided, whilst the impact of existing structures needs to be evaluated.	No

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
Spined Loach	Negative indicators	Fishery stocking consents. Impact assessments of stocking consents on a catchment scale may be required to determine an acceptable level.	No stocking/transfers of fish species at excessively high densities	Excessively high densities of predatory and benthivorous fish species can cause unacceptably high predation pressure and alter sediment characteristics and sedimentary food supply in ways that are highly detrimental to spined loach. Care needs to be taken to ensure that stocking exercises do not keep the densities of such species at unnaturally high levels.	No
	Water quality in **ditches** (i.e. not classified by EA): Biological water quality	Environment Agency's monitoring programmes	Equivalent to Class 'b' in the Biological module of the General Quality Assessment scheme	Generally, water quality should not be injurious to any life stage. A wide range of water quality parameters can affect the status of interest features, but biological monitoring techniques provide a reasonably integrated picture in relation to many parameters. A suitable methodology for monitoring biological quality in ditches will need to be agreed with the Environment Agency.	Yes
	Water quality in **ditches**: Dissolved oxygen, ammonia, BOD	Environment Agency's monitoring programmes	Equivalent quality to Chemical GQA Class 'C'		Yes
	Water quality in **ditches**: Soluble Reactive Phosphorus	Environment Agency's monitoring programmes	0.1 mg L-1 annual mean	Excessive enrichment with phosphorus increases the risk of impacts on the submerged plant community, which the spined loach uses for cover.	Yes

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
Spined Loach	Flow **(rivers)**	Gauging stations	Flow regime should be characteristic of the river. As a guideline, at least 90% of the naturalised daily mean flow should remain in the river throughout the year.	River flow affects a range of habitat factors of critical importance to spined loach, including current velocity, water depth, wetted area, substrate quality, dissolved oxygen levels and water temperature. The maintenance of both flushing flows and base flows, based on natural hydrological processes, is vital. Detailed investigations of habitat-flow relationships may indicate that a more or less stringent threshold may be appropriate for a specified reach; however, a precautionary approach would need to be taken to the use of less stringent values. Naturalised flow is defined as the flow in the absence of abstractions and discharges. The availability and reliability of data is patchy - long-term gauged data can be used until adequate naturalised data become available, although the impact of abstractions on historical flow records should be considered.	Yes

Audit Trail
Rationale for limiting standards to specified parts of the site
Rationale for site-specific targets (including any variations from generic guidance)
Rationale for selection of measures of condition (features and attributes for use in condition assessment) (The selected vegetation attributes are those considered to most economically define favourable condition at this site for the broad habitat type and any dependent designated species).
Other Notes

Table 3d Site specific definition of Favourable Condition (Ditch System)

To maintain the **Standing Open Water and Canals (Counter Drain/Old Bedford and Old Bedford River/River Delph)** at **Ouse Washes** in favourable condition, with particular reference to relevant specific designated interest features. Favourable condition is defined at this site in terms of the following site-specific standards:
Site-specific details of any geographical variation or limitations (where the favourable condition standards apply)

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
Ditch systems	Habitat structure: extent/composition of in-channel vegetation	Make an assessment for each of the structured walk sub-sections of the percentage (to nearest 5%) of channel length in early, mid and late successional stages. The overall results are the means of the three sets of values.	Mix of early, mid and late succession ditches: 10-25% early 35-75% mid 10-25% late	Characteristic faunal assemblages require a range of successional stages, from open water, through domination by submerged higher plants, to swamp communities. Some open water plant species require early and mid-successional stages, but late succession ditches are important for emergents. Early succession ditches are defined here as those that have been desilted or reprofiled in the same year as the monitoring visit. Late succession ditches have >70% cover of emergents. This may not be apparent if ditch vegetation has been cut in the season of the site visit. The large amount of organic debris and stems under the water will indicate this.	Yes

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
Ditch systems	Habitat structure: extent/composition of bankside vegetation	For each of the structured walk sub-sections, assess the percentage (to nearest 5%) of channel length that isheavily shaded (i.e. over 50% of the channel surface overhung) by coarse ruderal vegetation, scrub or hedges. The overall result is the mean of the values recorded for the sub-sections.	Where aquatic vegetation is a key feature of the site, no more than 10% of the channel length should be heavily shaded.	Although some bankside shading can provide habitat for some invertebrate species, heavy shading is detrimental to characteristic ditch flora and fauna. It shades out aquatic plants, leading to the loss of plant diversity and vegetated habitat for aquatic invertebrates and vertebrates. Where ditch vegetation is the chief interest (i.e. excluding areas where woodland is the key interest) shading should be limited. Ditches may be shaded by vegetation for only half their width, completely shaded for part of the day only, or densely and continuously shaded. Heavy shading (the feature assessed here) is defined as >50% of the ditch surface being overhung by bankside vegetation.	Yes

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
Ditch systems	Habitat structure: channel form	During the structured walk, note variation in ditch profiles and make an estimate of the percentage (to the nearest 5%) of ditch length with trapezoidal and non-trapezoidal cross sections in each sub-section of the route. The overall result is calculated by taking the mean of the figures for the sub-sections.	A range of variation in ditch profiles. If ditches are the only wetland feature, no more than 90% of ditch length with a trapezoidal cross-section.	Shallow, as well as deep water, is important for the maintenance of diverse plant and invertebrate assemblages. The context and traditional management practices of the site should be taken into consideration when deciding on the target for non-trapezoidal ditch length. In a fenland site with ample areas of shallow standing water, trapezoidal ditch profiles may be acceptable. Non-trapezoidal profiles include those where the banks have been trampled by stock, where the ditch has been allowed to silt up but still contains water, or where berms have been constructed. Berm creation is especially desirable in sites where there is little opportunity for extensive stands of emergent vegetation to develop by leaving some ditches unmanaged, where trampling of the banks by stock is limited, or where ditches are the only permanent wetland feature present.	Yes

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
Ditch systems	Aquatic vegetation composition: native species richness	20 fixed sampling points to be assessed in each ditch. Between mid June and mid August, record (on DAFOR scale) all native aquatic plant taxa in each 20 m sampling site. Calculate the mean number of species to give the overall result.	Native aquatic flora of ditches species-rich: freshwater ditches – mean of at least 7 species per 20m should be achieved.	The Ouse Washes is designated for the botanical interest of the ditches and therefore in-channel vegetation should be relatively rich in native plant species. Appendix 2 of the CSM Ditches guidance (March, 2005) should be used as a checklist of native aquatic plants (submerged, floating and emergent) when counting the number of species present. Some difficult vascular plant groups (e.g. *Utricularia* spp., *Callitriche* spp.), charophytes and mosses need only be identified to genus. Plants are recorded using the DAFOR scale of abundance. This enables trends in relative species abundance to be detected over a series of monitoring cycles, if required. In sites of exceptionally high quality, ditches may contain considerably more species per 20 m length than the target numbers. If this is the case, the mean number of taxa per sample should be used as the target in subsequent monitoring visits. If there is then a decrease of two or more species on average, compared with the initial visit, the condition of the ditch should be graded as	Yes

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
				unfavourable, even if the generalised target (freshwater: 7, brackish: 5) is met.	
Ditch systems	Indicators of local distinctiveness: rare species and quality indicators	Record for each sub-section of the structured walk the presence of rare aquatic plant species and other species/ communities chosen as 'quality indicators'. The 'quality indicator' species of particular interest for the Ouse Washes that are specified on Appendix 2 of the guidance are as follows: *Eleocharis acicularis* Needle Spike-rush, *Groenlandia densa* Opposite-leaved pondweed (not reliably recorded since the 1970s and maybe now extinct on the Ouse Washes), *Hottonia palustris* Water violet (rare on the Ouse Washes but recorded in 1986 in the Counter Drain), *Hydrocharis morsus-ranae* Frogbit, *Potomogeton compressus* Grass-wrack pondweed (see comments in Table x), *Potomogeton praelongus* Long-stalked Pondweed	Populations of rare species and other species/ communities characteristic of high quality ditch systems should persist.	The assessment of this attribute will also contribute towards assessing the Vascular Plant Assemblage feature as some of the quality indicators coincide with the scoring assemblage species. The aquatic flora may include internationally or nationally protected, nationally threatened or scarce species and should include other species indicative of high quality ditch systems as listed in Appendix 2 of the CSM guidance.	Yes

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
		Where possible, take note of the size and condition of the population and the extent of flowering.			
Ditch systems	Indicators of negative change: introduction of or natural colonisation by non-native plants	For each structured walk sub-section estimate abundance of non-native or introduced aquatic plant species: (a) for each of the four most invasivenon-native species (see Appendix 3 of the common standards guidance):separate percentage cover values (b) for all non-native and introduced species: a combined percentage cover value (to the nearest 5%). Occasionally sampling vegetation with a grapnel will be necessary. The overall results (for a and b) are the mean of the cover values for the sub-sections.	Mean cover of each very aggressive non-native plant not exceeding 1%. Mean total combined cover of all non-native species and introduced species less than 30%.	Non-native plant invasions may result in gross distortions to aquatic plant communities. The very aggressive *Azolla* spp., *Crassula helmsii* and *Hydrocotyle ranunculoides* can blanket sections of ditch and out-compete native species, resulting in a significant loss in diversity. *Myriophyllum aquaticum* may also have this potential in ditches. A more stringent target may be necessary on large ditch systems. Native plants are able to co-exist somewhat more easily with other non-native species, such as *Acorus calamus*, *Elodea* spp. and *Lagarosiphon major*. The non-native *Lemna minuta* is not included in this assessment unless it is found to be dominant, because it is very difficult to distinguish from *Lemna minor.* Where invasive native plants with a restricted natural distribution in the UK (e.g. *Stratiotes aloides* and *Nymphoides*	Yes

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
				peltata) are introduced to a site outside their natural range, these species should be treated as 'non-native'.	
Ditch systems	Habitat functioning: water quality a) water clarity	Along the structured walk note unnatural turbidity or discoloration of water. For each sub-section, record % of the length (to nearest 5%) with clear water, % with slight turbidity/coloration and % with marked turbidity/coloration. The overall result is the mean of each set of figures from the sub-sections.	Water clear or only slightly turbid/discoloured in at least 90% of channel length	Both turbidity and coloration are recorded under this attribute. Blooms of planktonic algae cause reduced water clarity. Ochre deposits in peaty areas can also cause discoloration. Brown coloration of the water in acid peat areas is natural, so should not be regarded as discoloration.	Yes
Ditch systems	Habitat functioning: water quality b) extent of algal dominance	For each structured walk sub-section, in freshwater ditches only, estimate % cover of the channel (to nearest 5%) by filamentous algae and *Enteromorpha* species taken together. Occasional sampling of thevegetation by grapnel may be necessary. The overall result is the mean of cover values for the sub-sections.	Mean cover of filamentous macro-algae and *Enteromorpha* not more than 10% (mid June to end August)	The effect of excessive nutrient enrichment is often signified by increased prevalence of algae, either filamentous or planktonic. Algae such as *Enteromorpha* are not good indicators in saline conditions. Charophytes are not included in the group of macro-algae indicative of nutrient enrichment because they need clear water.	Yes

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
Ditch systems	Habitat functioning: water quality c) water chemistry	Water chemistry should be assessed by reference to existing Environment Agency monitoring data either for the site or, where this is not available, for the feeding waters.	Total phosphorus <0.1 mg $L^{-1.}$ Biological GQA Class 'b'. In addition, no drop in class from existing situation. Chemical GQA Class 'B'. In addition, no drop in class from existing situation.	Water sampling and analysis is carried out routinely on this site by the Environment Agency. Toxic substances are of concern, but there is currently no relevant standard biological monitoring technique or surveillance programme for ditches. For basic parameters (dissolved oxygen, biochemical oxygen demand and total ammonia) a minimum equivalent to biological and chemical GQA classes are assessed.	Yes
Ditch systems	Habitat functioning: water availability	Ideally, depth gauges should be inserted in ditches at strategic points. During the structured walk, water levels should be recorded using these gauges and/or by probing ditches with a pole marked in quarter metre intervals. Permanent marked depth gauges are already in place at certain places along the main drains for reading.	Characteristic water levels to be maintained. A target minimum water depth of 1m in the 'outer river' (Counter Drain/Old Bedford) should be maintained during the summer for at least 90% of the channel length. A target minimum water depth of 0.5m in the 'inner river' (Old Bedford/River Delph) should be maintained during the summer for at	Water level data in the River Delph are available from the RSPB, measured at Welches Dam and unlikely to vary much from this along its entire length. The water level of the 'inner river' is linked to the water levels on the grassland Units of the Ouse Washes where 0.5m is the summer target retention level in the Water Level Management Plan. High water levels are particularly important in spring and early summer for semi-aquatic riparian invertebrates. Except for parts of the ditch system that dry up naturally in the summer or are	Yes

Site-specific standards defining favourable condition					
Criteria feature	**Attribute term in guidance**	**Measure**	**Site-specific Targets**	**Comments**	**Use for CA?**
			least 90% of the channel length.	influenced by tidal flow, a good depth of water should be maintained. If the site is used as a wash, or if ditches within it are used as reservoirs by the drainage authorities or the land manager, periodic flooding or high water levels will be encountered.	

Audit Trail
Rationale for limiting standards to specified parts of the site
Rationale for site-specific targets (including any variations from generic guidance)
The target for non-trapezoidal channel form has been raised from 75% as suggested in the CSM guidance for Ditches (March 2005) to 90% because there is little further scope for diversifying the channel form on these two main drainage channels. Additionally, many areas of shallow standing water occur in other parts of the wider washland site. The number of 20m sampling lengths has been raised from 5-10 (as suggested in the above guidance) to 20 per ditch because the main drainage ditches under consideration are circa 30km long. Salinity gradient assessment has been omitted as this is a freshwater site.
Rationale for selection of measures of condition (features and attributes for use in condition assessment) (The selected vegetation attributes are those considered to most economically define favourable condition at this site for the broad habitat type and any dependent designated species).
Other Notes

Annex 2 Location of features by unit

Features	units	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Neutral Grassland - Lowland		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*								
Rivers and streams																	*	*	*		*		*	
Improved Grassland																				*		*		*