#### CYNGOR CEFN GWLAD CYMRU COUNTRYSIDE COUNCIL FOR WALES

## **CORE MANAGEMENT PLAN** INCLUDING CONSERVATION OBJECTIVES

## FOR

## Fenn`s, Whixall, Bettisfield, Wem and Cadney Mosses Special Area of Conservation (SAC)

Version: Final

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Approved by: Tim Jones, 13<sup>th</sup> March 2008

A Welsh version of all or part of this document can be made available on request.









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## **PREFACE**

This document provides the main elements of CCW's management plan for the site(s) named. It sets out what needs to be achieved on the site(s), the results of monitoring and advice on the action required. This document is made available through CCW's web site and may be revised in response to changing circumstances or new information. This is a technical document that supplements summary information on the web site.

One of the key functions of this document is to provide CCW's statement of the Conservation Objectives for the relevant Natura 2000 site(s). This is required to implement the Conservation (Natural Habitats, &c.) Regulations 1994, as amended (Section 4). As a matter of Welsh Assembly Government Policy, the provisions of those regulations are also to be applied to Ramsar sites in Wales.

## 1. VISION FOR THE SITE

This is a descriptive overview of what needs to be achieved for conservation on the site. It brings together and summarises the Conservation Objectives (part 4) into a single, integrated statement about the site.

Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses SAC will be restored to actively growing, and peat forming raised bogs, surrounded by unintensively-managed habitats on mineral ground.

Walking across the central bog expanses one will be amazed by the natural domes formed by the accumulation of peat. In the case of the Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses SAC, you will be stunned by the sheer size of the bog which extends as far as the eye can see. At first glance, it will appear uniform greenish-brown, but a closer look shows a rich mix of reds, browns, greens and yellows; and during the summer, the nodding white heads of cotton-sedge.

The raised bogs will be a self-maintaining, virtually treeless carpet of peat-forming bog mosses together with a small number of specialist plants. A walk over the bog will further reveal the range of specialised plants that thrive here. Bog plants will grow on a deep layer of waterlogged peat, often several metres thick, made up of the partly decomposed remains of previous bog plants.

The surface of the bogs will consist of a mixture of small, moss-filled waterlogged hollows and slightly drier hummocks where heathers grow. You may also see an occasional small bogpool. The tallest plants, standing at about knee-height, will be cross-leaved heath, common heather and cotton-sedge, which grow in the wetter areas. Growing among these plants you will also find crowberry, cranberry, deer-grass and purple moor-grass. Below the taller plants you will see sphagnum bog mosses. These spongy, water-holding mosses form a hummocky and colourful carpet in a variety of greens and reds. You may also see insect-eating sundews and the fragrant yellow bog asphodel on the bog moss lawns.

The bog is home to many rare insects, which include large heath butterflies, white-faced darter dragonflies, back from the brink of extinction, bog bush-crickets and raft spiders,. O might hear the song of curlew, lapwing, skylark and meadow pipit flying over the bog and watch acrobatic hobby hunting the wide variety of dragonflies. The distinctive plop of water voles maybe heard and adders maybe seen basking in the sun.

Near the edges of the bog, scattered scrub provides refuge and nectar sources for insects and birds. Around the edge of the site you will find, willow and alder woodland, along with wet heath, rush pasture and fen. Drier habitats will include areas of birch. On the mineral ground slopes around the edge of the bog, heath, low intensity farmland, scrub and native woodland, rush pasture and rabbit grazed *Teesdalia* grassland will occur.

## 2. <u>SITE DESCRIPTION</u>

#### 2.1 Areas and Designations Covered by this Plan

Grid reference(s): SJ487364

Unitary authority(ies): Wrexham County Borough Council; Shropshire.

Area (hectares): 949.20 ha

Designations covered:

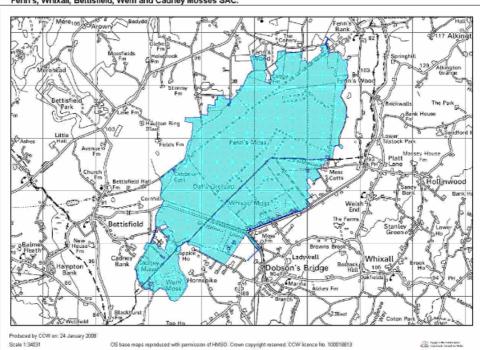
The Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses Special Area of Conservation (SAC) comprises one component SSSI

- Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses SSSI
- Midland Mires and Mosses Ramsar phase 2 Site fall within Wales.
- National Nature Reserve, areas in Countryside Council for Wales (CCW) & Natural England (NE) tenure.

(Note: SSSI, SAC & RAMSAR designations share the same boundary.)

Detailed maps of the designated sites are available through CCW's web site: http://www.ccw.gov.uk/interactive-maps/protected-areas-map.aspx

A summary map showing the coverage of this document is shown below:



Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses SAC.

Fenn's Whixall, Bettisfield, Wem and Cadney Mosses SSSI and SAC.

#### 2.2 Outline Description

#### Fenn's Whixall, Bettisfield, Wem & Cadney Mosses SSSI

This is a large lowland raised bog that straddles the English/Welsh border. It is amongst the largest and most southerly raised bogs in the UK. Although much of the site has been subject to peat extraction, areas of partially-cut and uncut mire still remain. In areas formerly subject to peat-cutting, recent conservation management is leding to the regeneration of bog-forming vegetation. Mire vegetation includes *Sphagnum cuspidatum, Sphagnum papillosum, Sphagnum magellanicum, Sphagnum pulchrum,* all three British species of sundew *Drosera* spp, cranberry *Vaccinium oxycoccos*, bog asphodel *Narthecium ossifragum*, royal fern *Osmunda regalis*, white beak-sedge *Rhynchospora alba* and bog-rosemary *Andromeda polifolia*, together with the nationally scarce moss *Dicranum bergeri*. Over 1,800 invertebrate species have been recorded here, including 29 nationally rare Red Data Book species.

#### 2.3 Outline of Past and Current Management

Fenn's Whixall, Bettisfield, Wem & Cadney Mosses SSSI

Peat cutting has taken place extensively across this site. On Fenn's Moss this has been conducted at a commercial level, whereas on Whixall Moss smaller scale hand cutting has occurred. These operations have created an intensive series of ditches across the site. Forest plantations have also been established on the Mosses. Bettisfield Moss has recently been cleared of trees. Much of the land on the edge and surrounding the Mosses has been drained for agriculture; this has impacted upon the water levels in the mosses and has influenced the vegetation communities present.

In December 1990 the Nature Conservancy Council (NCC) purchased the freehold of 137 ha of Whixall and Bettisfield Mosses and the Manor House peat factory; and took over the lease for the central 260 ha of Fenn's Moss. Shropshire Wildlife Trust has also acquired the rights of the Manor and shooting rights for Wem Moss. The Countryside Council for Wales (CCW) and Natural England (NE) have been restoring the site back to active raised bog. Clearing trees, scrub, and blocking ditches to raise the waterlevels and installing storm water control measures have been the methods used to achieve this. Within areas that CCW does not own or lease a number of management agreements are held between land owners/occupiers, this has enabled CCW and NE to influence how land is managed.

Part of the site has been designated as a National Nature Reserve (NNR) and thus in addition to nature conservation is managed for recreational and awareness raising purposes. A series of paths run through the site, including the Mosses trail.

#### 2.4 Management Units

The plan area has been divided into management units to enable practical communication about features, objectives, and management. This will also allow us to differentiate between the different designations where necessary.

See attached map showing the management units referred to in this plan.

		UNIT NAME	Ĩ																			
UNIQUE ID	MU_FENNS		SAC	ISSS	RAMSAR	NNR	CCW_OWN	SAC_RB	SAC_DB	RAMSAR_1	RAMSAR_2	RAMSAR_3	I_ISSSI_I	SSSI_2	£_ISSS	SSSI_4	SSSI_5	9 <sup>-</sup> ISSSI	SSSI_7	8_SSI_8	6 <sup>-</sup> ISSS	SSSI_10
1807	3.40	NE FENNS MOSS	Y	Y	Y	Y	Ν	KH	KH	KH	KS	KS	KH	KH	Х	KS	KS	KS	KS	KS	KS	KS
1808		FENNS MOSS SECTION 2	Y	Y	Y	Y	Ν		KH	КН	SYM	SYM	КН	SYM	Х	SYM	SYM		Х	SYM	SYM	KS
1809		MOSS VILLA 1	Y	Y	Y	Y	Ν	KH	Х	SYM	SYM	SYM	KH	SYM	Х	SYM	SYM	SYM	SYM	SYM	SYM	Х
1810	3.70	NOOK LANE FIELDS	Y	Y	Y	Y	Ν	Х	KH	КН	KS	KS	КН	KH	Х	KS	KS	SYM	SYM	SYM	SYM	SYM
1811		BETTIISFIELD WOODLAND	Y	Y	Y				КН	КН	KS	KS	Х	SYM	Х	SYM	Х	Х	SYM	Х	Х	Х
1812	53.00	MILL VILLA	Y	Y	Y	Ν	Ν		KH	KH	Х	Х	Х	SYM	Х		SYM	Х	Х	Х	Х	Х
1813	73.00	POOLS DITCH	Y	Y	Y	Ν	Ν	Х	KH	SYM	SYM	SYM	SYM	KH	Х	SYM	Х	Х	Х	Х	Х	Х
1814	77.00	FENNS WOOD POND	Y	Y	Y	Ν	Ν	Х	KH	КН	SYM	SYM	Х	KH	Х	SYM	SYM	Х	Х	Х	Х	Х
1816	89.00	RODEN	Y	Y	Y	Х	Х	Х	KH	SYM	SYM	SYM	Х	SYM	Х	SYM	Х	Х	Х	Х	Х	Х
1817	56.00	MOSS LANE HOLDING	Y	Y	Y	N	Ν	Х	KH	SYM	SYM	SYM	Х	SYM	Х	SYM	SYM	SYM	SYM	Х	Х	Х
1818	57.00	FEN CARR BOG	Y	Y	Y	N	Ν	Х	KH	КН	KS	KS	Х	KH	Х	KS	KS	Х	Х	KS	SYM	SYM
1819	58.00	THE HOLLIES FIELD	Y	Y	Y	N	Ν	Х	KH	SYM	SYM	SYM	SYM	KH	Х	SYM	SYM	Х	SYM	Х	Х	Х
1820	98.00	CAMBRIAN COTTAGE DRAINAGE DITCH	Y	Y	Y	N	N	Х	КН	КН	KS	KS	Х	КН	Х	KS	KS	Х	Х	Х	Х	Х
1821	63.00	MOSS VILLA FIELD 2	Y	Y	Y	Ν	Ν	Х	KH	Х	Х	Х	Х	Х	Х	SYM	SYM	Х	Х	Х	Х	Х
1822		WOODLAND ADJACENT TO MAELOR FOREST	Y			N		Х	Х	Х	Х	Х	Х	Х	Х	SYM	Х	Х	Х	Х	Х	Х
1823	3.30	FENNS MOSS SECTION 3	Y	Y	Y	Y	Ν	Х	KH	KH	SYM	SYM	KH	Х	Х	SYM	SYM	KS	Х	SYM	SYM	KS
1824		FENNS MOSS N RAILWAY 1							КН	Х	Х	Х	Х	Х		SYM	SYM	X	Х	Х	Х	Х
1825		CAMBRIAN COTTAGE FIELDS					N			SYM	SYM	SYM	SYM	КН		SYM	SYM		SYM	SYM	SYM	SYM
1825		CAMBRIAN COTTAGE FIELDS	Y	Y	Y	Y	N	Х	KH	SYM	SYM	SYM	SYM	KH	КH	SYM	SYM	KS	SYM	SYM	SYM	SYM

The following table confirms the relationships between the management units and the designations covered:

		UNIT NAME																				
UNIQUE ID	MU_FENNS		SAC	ISSS	RAMSAR	NNR	CCW_OWN	SAC_RB	SAC_DB	RAMSAR_1	RAMSAR_2	RAMSAR_3	I_ISSS	SSSI_2	£_ISSS	SSSI_4	SSSI_5	8SSI_6	SSSI_7	SSSI_8	6 ISSS	SSSI_10
1826	68.00	MAELOR FOREST 1	Y	Y	Y	Ν	Ν	Х	КН	SYM	SYM	SYM	SYM	SYM	Х	SYM						
1828	3.12	CADNEY FARM	Y	Y	Y	Y	Ν	Х	KH	KH	KS	KS	Х	SYM	Х	SYM	SYM	SYM	Х	Х	Х	Х
1830	74.00	FENNS WOOD FARM FIELDS	Y	Y	Y	N	N	Х	КН	SYM	SYM	SYM	SYM	SYM	Х	SYM	SYM	KS	Х	Х	Х	Х
1831	50.00	ROSEVILLE	Y	Y	Y	Ν	Ν	Х	KH	КН	SYM	SYM	Х	SYM	Х	SYM	SYM	Х	SYM	Х	Х	Х
1832	55.00	MOSS COTTAGE	Y	Y	Y	Ν	Ν	Х	KH	SYM	SYM	SYM	SYM	КН	Х	SYM						
1833	65.00	CHAPEL LANE TRIANGLE	Y	Y	Y	N	Ν	Х	Х	Х	Х	Х	Х	Х	Х	SYM	Х	Х	Х	Х	Х	Х
1834	71.00	FENNS WOODLAND N OF RAILWAY SMALL	Y	Y	Y	N	N	Х	КН	SYM	SYM	SYM	SYM	SYM	Х	SYM						
1835		(MAIN)	Y	Y	Y	Y	N	КН	КН	КН	KS	KS	КН	KS	Х	KS						
1836	69.00	LODGE FARM LARGE COMPARTMENT	Y	Y	Y	N	N	Х	КН	SYM	KS	KS	SYM	КН	Х	KS	KS	SYM	SYM	Х	Х	Х
1838	48.00	THE RUSSETTS 2	Y	Y	Y	N	Ν	Х	KH	Х	Х	Х	Х	Х	Х	SYM	SYM	Х	Х	Х	Х	Х
1840	75.00	FENNS WOOD TRIANGLE WOOD	Y	Y	Y	N	N	Х	КН	SYM	SYM	SYM	SYM	SYM	Х	SYM	SYM	SYM	SYM	SYM	SYM	Х
1841	51.00	STRAWBERRY FIELD	Y	Y	Y	Ν	Ν	Х	KH	КН	SYM	SYM	Х	SYM	Х	SYM	Х	Х	Х	Х	Х	Х
1842	54.00	PLATT LANE WOODLAND	Y	Y	Y	Ν	Ν	Х	KH	КН	SYM	SYM	КН	SYM	Х	SYM	SYM	Х	Х	Х	SYM	SYM
1843			Y	Y	Y	Y	Ν	Х	KH	SYM	SYM	SYM	КН	КН	Х	KS	KS	Х	Х	Х	KS	Х
1844	2.10	BETTISFIELD MOSS	Y	Y	Y	Y	Y	KH	KH	КН	KS	KS	КН	SYM	Х	KS	KS	KS	SYM	KS	KS	SYM
1846	76.00	FENNS WOOD LONG MILE WOOD	Y	Y	Y	N	N	Х	КН	Х	Х	Х	Х	Х	Х	SYM	SYM	X	Х	Х	Х	Х
1847	60.00	CAMBRIAN COTTAGE	Y	Y	Y	Ν	Ν	Х	KH	Х	Х	Х	Х	KH	Х	SYM	Х	Х	Х	Х	Х	Х
1848	3.13	FENNS MOSS N RAILWAY 2			Y		N	КН	КН	КН	KS	KS	КН	КН	Х	KS	KS	KS	SYM	KS	KS	KS
1850	2.30	CUCKOOS CORNER WOOD & WILLOWS	Y	Y	Y	Y	Y	Х	КН	КН	SYM	SYM	КН	SYM	Х	KS	Х	Х	Х	Х	Х	Х

		UNIT NAME																				
UNIQUE ID	MU_FENNS		SAC	ISSS	RAMSAR	NNR	CCW_OWN	SAC_RB	SAC_DB	RAMSAR_1	RAMSAR_2	RAMSAR_3	SSSI_1	SSSI_2	SSSI_3	SSSI_4	SSSI_5	9 ISSS	SSSI_7	SSSI_8	6 <sup>-</sup> ISSS	SSSI_10
1853	2.60	MAELOR FOREST 2	Y	Y	Y	Ν	Y	Х	KH	KH	SYM	SYM	SYM	SYM	Х	SYM	KS	SYM	Х	SYM	KS	SYM
1854		THE RUSSETTS WOODLAND	Y	Y	Y	N	N	Х	КН	КН	SYM	SYM	Х	SYM	Х	SYM	SYM	SYM	Х	Х	Х	Х
1856		CAMBRIAN COTTAGE DISUSED RAILWAY LINE	Y		Y	N	N	Х	Х	Х	Х	Х	Х	Х	Х	SYM	Х	Х	Х	Х	Х	Х
1857	63.00	MOSS VILLA 2	Y	Y	Y	Ν	Ν	Х	KH	SYM	SYM	SYM	SYM	KH	Х	SYM	Х	Х	Х	Х	Х	Х
1858	70.00	LODGE FARM SMALL COMPARTMENT	Y	Y	Y	N	N	Х	Х	Х	Х	SYM	Х	Х	Х	KS	Х	Х	Х	Х	Х	Х
1859	2.40	MAELOR NURSERY	Y	Y	Y	Y	Ν	Х	KH	SYM	SYM	SYM	SYM	KH	Х	SYM	KS	SYM	Х	SYM	SYM	SYM
1860	3.14	CUCKOOS CORNER WOODLAND 1	Y	Y	Y	Y	N	Х	КН	КН	SYM	SYM	SYM	КН	Х	SYM	SYM	SYM	SYM	SYM	SYM	SYM
1861	78.00	MANOR HOUSE ADJACENT	Y	Y	Y	N	N	Х	КН	SYM	SYM	SYM	Х	SYM	Х	SYM	Х	SYM	Х	Х	Х	Х
1862	59.00	THE CANAL	Y	Y	Y	Ν	Ν	Х	KH	KH	KS	KS	KH	KH	Х	KS	KS	Х	SYM	SYM	SYM	SYM
1863		FENNS WOODLAND N OF RAILWAY LARGE	Y	Y	Y	N	N	Х	КН	SYM	SYM	SYM	SYM	SYM	Х	SYM	SYM	SYM	SYM	SYM	SYM	SYM
1864	2.50	CUCKOOS CORNER FIELD	Х	Х	Х	Ν	Ν	Х	Х	Х	Х	Х	Х	Х	Х			Х	Х	Х	Х	Х
1865	64.00	MOSS VILLA FIELD 1	Y	Y	Y	Ν	N	Х	Х	Х	Х	Х	Х	Х	Х	KS	Х	Х	Х	Х	Х	Х
2960	113.0 0	MOSS LANE	Y	Y	Y	N	N	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
2969		CONERY LANE WOODLAND	Y	Y	Y	N	N	Х	КН	SYM	SYM	SYM	SYM	SYM	Х	SYM	SYM	SYM	SYM	SYM	SYM	SYM

# 3. <u>THE SPECIAL FEATURES</u>

### 3.1 Confirmation of Special Features

Designated feature	Relationships, nomenclature etc	Conservation Objective in part 4
SAC features Annex I habitats that a	re a primary reason for selection of thi	s site
<ul><li><i>I</i>. Active raised bogs</li><li>*Priority feature</li><li>(EU Habitat Code: 7100)</li></ul>		1
SAC features Annex I habitats preser selection of this site	nt as a qualifying feature, but not a prin	nary reason for
2. Degraded raised bogs still capable of natural regeneration (EU Habitat Code: 7120)	See SAC Active raised bog. Aim is to convert this into active raised bog.	1
Ramsar features		
Ramsar criterion 1 : The site comprises a diverse range of habitats from open water to raised bog.	See SAC Active raised bog.	1
Ramsar criterion 2 : Supports a number of rare species of plants associated with wetlands, including the nationally scarce cowbane <i>Cicuta virosa</i> and, elongated sedge <i>Carex elongata</i> . Also present are the nationally scarce bryophytes <i>Dicranum bergeri</i> and <i>Sphagnum pulchrum</i> .	See SAC Active raised bog.	1
Ramsar criterion 2 : Also supports an assemblage of invertebrates including several rare species. There are 16 species of British Red Data Book insect listed for this site including the following endangered species: the moth <i>Glyphipteryx lathamella</i> , the caddisfly <i>Hagenella clathrata</i> and the sawfly <i>Trichiosoma vitellinae</i> .	Some of these will be dealt with under SAC Active raised bog.	1 (Some features covered in 1.)
SSSI features – Fenn's Whixall, Bettis	field, Wem & Cadney Mosses SSSI	
Lowland raised bog	See SAC Active raised bog.	1
Semi-natural mossland communities	See SAC Active raised bog.	1
U1c grassland	This feature has been added since the initial site notification	
Invertebrate Assemblage	This conservation objective incorporates performance indicators for both raised bog species and non- mire species	1 (Some features covered in 1.)
Odonata Assemblage (Dragon & Damselflies)	This will be addressed under the SAC conservation objective for the	1 (Some features

	invertebrate assemblage	covered in 1.)
Curlew – Numenius arquata	This species has special requirements	
A Caddisfly - Hagenella clathrata	This species has special requirements	
Large heath butterfly – Coenonympha tullia	See SAC Active raised bog.	1
White faced darter dragonfly – Leucorrhinia dubia	See SAC Active raised bog.	1
Northern footman moth – <i>Eilema sericea</i>	This species has special requirements	

#### 3.2 Special Features and Management Units

This section sets out the relationship between the special features and each management unit. This is intended to provide a clear statement about what each unit should be managed for, taking into account the varied needs of the different special features. All special features are allocated to one of seven classes in each management unit. These classes are:

#### **Key Features**

**KH** - a 'Key Habitat' in the management unit, i.e. the habitat that is the main focus of management and monitoring effort, perhaps because of the dependence of a key species (see KS below). There will rarely be more than one Key Habitat in a unit.

**KS** – a 'Key Species' in the management unit, often driving both the selection and management of a Key Habitat.

**Geo** – an earth science feature that is the main focus of management and monitoring effort in a unit.

#### **Other Features**

**Sym** - habitats, species and earth science features that are of importance in a unit but are not the main focus of management or monitoring. These features will benefit from management for the key feature(s) identified in the unit. These may be classed as 'Sym' features because:

- a) they are present in the unit but are of less conservation importance than the key feature; and/or
- b) they are present in the unit but in small areas/numbers, with the bulk of the feature in other units of the site; and/or
- c) their requirements are broader than and compatible with the management needs of the key feature(s).

**Nm** - an infrequently used category where features are at risk of decline within a unit as a result of meeting the management needs of the key feature(s), i.e. under Negative Management. These cases will usually be compensated for by management elsewhere in the

plan, and can be used where minor occurrences of a feature would otherwise lead to apparent conflict with another key feature in a unit.

**Mn** - Management units with no special feature present but which are of importance for management of features elsewhere on a site e.g. livestock over-wintering area included within designation boundaries.

 $\mathbf{x}$  – Features not present in the management unit.

The table(s) below sets out the relationship between the special features and management units identified in this plan:

## 4. CONSERVATION OBJECTIVES

#### **Background to Conservation Objectives:**

#### a. Outline of the legal context and purpose of conservation objectives.

Conservation objectives are required by the 1992 'Habitats' Directive (92/43/EEC). The aim of the Habitats Directives is the maintenance, or where appropriate the restoration of the 'favourable conservation status' of habitats and species features for which SACs and SPAs are designated (see Box 1).

In the broadest terms, 'favourable conservation status' means a feature is in satisfactory condition and all the things needed to keep it that way are in place for the foreseeable future. CCW considers that the concept of favourable conservation status provides a practical and legally robust basis for conservation objectives for Natura 2000 and Ramsar sites.

#### Box 1

# Favourable conservation status as defined in Articles 1(e) and 1(i) of the Habitats Directive

"The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long term survival of its typical species. The conservation status of a natural habitat will be taken as favourable when:

- Its natural range and areas it covers within that range are stable or increasing, and
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- The conservation status of its typical species is favourable.

The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' when:

- population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis."

Achieving these objectives requires appropriate management and the control of factors that may cause deterioration of habitats or significant disturbance to species.

As well as the overall function of communication, Conservation objectives have a number of specific roles:

• Conservation planning and management.

The conservation objectives guide management of sites, to maintain or restore the habitats and species in favourable condition.

• Assessing plans and projects.

Article 6(3) of the 'Habitats' Directive requires appropriate assessment of proposed plans and projects against a site's conservation objectives. Subject to certain exceptions, plans or projects may not proceed unless it is established that they will not adversely affect the integrity of sites. This role for testing plans and projects also applies to the review of existing decisions and consents.

• Monitoring and reporting.

The conservation objectives provide the basis for assessing the condition of a feature and the status of factors that affect it. CCW uses 'performance indicators' within the conservation objectives, as the basis for monitoring and reporting. Performance indicators are selected to provide useful information about the condition of a feature and the factors that affect it.

The conservation objectives in this document reflect CCW's current information and understanding of the site and its features and their importance in an international context. The conservation objectives are subject to review by CCW in light of new knowledge.

#### **b.** Format of the conservation objectives

There is one conservation objective for each feature listed in part 3. Each conservation objective is a composite statement representing a site-specific description of what is considered to be the favourable conservation status of the feature. These statements apply to a whole feature as it occurs within the whole plan area, although section 3.2 sets out their relevance to individual management units.

Each conservation objective consists of the following two elements:

- 1. Vision for the feature
- 2. Performance indicators

As a result of the general practice developed and agreed within the UK Conservation Agencies, conservation objectives include performance indicators, the selection of which should be informed by JNCC guidance on Common Standards Monitoring<sup>1</sup>.

There is a critical need for clarity over the role of performance indicators within the conservation objectives. A conservation objective, because it includes the vision for the feature, has meaning and substance independently of the performance indicators, and is more than the sum of the performance indicators. The performance indicators are simply what make the conservation objectives measurable, and are thus part of, not a substitute for, the conservation objectives. Any feature attribute identified in the performance indicators should be represented in the vision for the feature, but not all elements of the vision for the feature will necessarily have corresponding performance indicators.

As well as describing the aspirations for the condition of the feature, the Vision section of each conservation objective contains a statement that the factors necessary to maintain those desired conditions are under control. Subject to technical, practical and resource constraints, factors which have an important influence on the condition of the feature are identified in the performance indicators.

<sup>&</sup>lt;sup>1</sup> Available through <u>www.jncc.gov.uk</u> and follow links to Protected Sites and Common Standards Monitoring.

#### **4.1 Conservation Objective for Feature 1:**

#### Active raised bogs \* Priority habitat (EU Habitat Code: 7100)

#### Vision for feature 1

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

- 1. The whole of the central expanse of the site will be occupied by Active raised mire communities, dominated by *Sphagnum* bog moss, the main peat forming plant. Degraded raised bog will be much reduced.
- 2. Peat would be actively accumulating.
- 3. The bog macrotope should be restored. The central mire expanse of wet bog communities will be surrounded by random habitats such as heather, purple moor grass and birch scrub then fen, swamp and alder/willow carr woodland.
- 4. The Bog hydrology must be repaired & maintained near peat surface.
- 5. All of the arterial and minor drains will be blocked, with only certain shallow drains retained to maintain access tracks.
- 6. Further drainage will not occur.
- 7. Species of particular importance which indicate good quality active raised mire habitat, such as waved fork-moss *Dicranum bergeri*, golden bog-moss *Sphagnum pulchrum*, bog rosemary *Andromeda polifolia* and lesser bladder-wort *Utricularia minor*, will be much more widespread on the site.
- 8. White-beaked sedge *Rhynchospora alba* and bog asphodel *Narthecium ossifragum* will be occasional and locally abundant site.
- 9. Bog pools with open water will always be present.
- 10. Mineral-rich water will be diverted around the edge of the peat body, back to its original lagg location. Excluding bog springs.
- 11. Low input agriculture will occur on the surrounding land preventing nutrient enrichment of the bogs.
- 12. Peat cutting and moss collecting will cease.
- 13. There will be no bare peat.
- 14. Burning will be prevented as it retards the development of hummock & hollows as well as the development of more sensitive Sphagna.
- 15. On the mire expanse the following species are absent; *Cirsium* spp., *Deschampsia* cespitosa, Epilobium hirsutum, Glyceria maxima, Juncus effusus, Molinia caerulea, Phalaris arundinacea, Phragmites australis, Pteridium aquilinum, Urtica dioica
- 16. On the mire expanse the scrub and trees over 20cm high will be absent.
- 17. Non-native plant species will be absent.
- 18. There will be no invasion by seedlings from either Broadleaved or conifer plantations established near the site.
- 19. All factors affecting the achievement of theses conditions are under control.

#### **Performance indicators for Feature 1**

The performance indicators are <u>part of</u> the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

Performance indicators for	feature condition	
Attribute	Attribute rationale and other comments	Specified limits
A1. Habitat Extent	Based on the extent notified as SAC: Active raised bog = $676.8$ ha, Degraded raised bog = $240.1$ ha.	Active raised bog Upper limit: n/a Lower limit: 676.8 ha
A2. Quality	CSM sampling pass rate	Degraded raised bog Upper limit: 240.1 ha Lower limit: none set as long as it is converted to Active raised bog. Upper limit: Not required Lower limit: In each complete plot
		Lower limit: In each sample plot $\geq 60\%$ of the active raised bog points are "good quality" as described below.
A3. Vegetation composition: positive indicators – bryophytes	The following should be present. all Sphagnum species (Within a 1m radius of each sampling point)	<i>Upper limit</i> : Not required <i>Lower limit</i> : At least 20% <i>Sphagnum</i> cover.
	The following should be present. Fat sphagnum cover (Within a 1m radius of each sampling point)	Upper limit: Not required Lower limit: At least 20% cover of "Fat" Sphagnum. Sphagnum papillosum, S. palustre, S. magellanicum and S. imbricatum.
A4.Vegetation composition: positive indicators – vascular plants	The following should be present. Within a 1m radius of each sampling point.	Upper limit: Not required Lower limit: At least two of the following species are present; Calluna vulgaris, Erica tetralix, Eriophorum angustifolium, E. vaginatum, Trichophorum cespitosum. <u>and</u> Upper limit: the cover of any one of the above species should be <50% cover. Lower limit: none

	The following should be present. Within a 1m radius of each sampling point.	Upper limit: Not required Lower limit: At least two of the following should be present; Andromeda polifolia, Drosera spp., Narthecium ossifragum, Rhynchospora alba, Vaccinium oxycoccus.
A5. Vegetation composition: indicators of negative change – bryophytes	"other mosses i.e. excluding Sphagnum. Within a 1m radius of each sampling point.	<i>Upper limit</i> : Other mosses forming patches > 10cm x 10cm patches are absent. <i>Lower limit</i> :n/a
A6. Habitat structure	Bare ground or peat should be absent from the monitoring point. Within a 1m radius of each sampling point.	<i>Upper limit</i> : Bare peat is absent <i>Lower limit:n/a</i>
A7. Vegetation composition: indicators of negative change – non- woody vascular plant species	The following should be absent. <b>Within a 5m radius</b> of each sampling point.	Upper limit: The following species are absent; Cirsium spp., Deschampsia cespitosa, Epilobium hirsutum, Glyceria maxima, Juncus effusus, Molinia caerulea, Phalaris arundinacea, Phragmites australis, Pteridium aquilinum, Urtica dioica Lower limit: n/a
A8. Vegetation composition: indicators of negative change – undesirable woody species	The following should be absent. Within a 5m radius of each sampling point.	<i>Upper limit</i> : Scrub and trees > 20cm in height are absent. <i>Lower limit :n/a</i>
Performance indicators for Factor	factors affecting the feature Factor rationale and other	On on ation al Limita
Fuctor	comments	Operational Limits
F1. Water management	Bog water table	Upper limit: Water table above
	Water levels for raised mire formation should be stable and lie at or near to the surface all year round. <i>Sphagnum</i> has regenerated best on the rehabilitated areas where water levels are at or within 10 cm of peat surface for more than 70% of the year	10cm of peat surface for more than 70% of the year. <i>Lower limit</i> : Water table below 10cm of peat surface for more than 70% of the year.

Drainage Any interception of water in the catchment of the bog, particularly around the north of the Mosses could also have deleterious effects and so new drainage works will have to be carefully considered and as far as possible the natural hydrology of the SSSI needs to be restored Water movement within the peat	<i>Upper limit</i> : n/a <i>Lower limit</i> : Drainage within the catchment should not adversely impact the site. <i>Upper limit</i> : n/a
<b>body</b> Investigations of the hydrology and morphology of the peat body have indicated that large areas of the peat body are closely connected. Drainage activities on any part of the peat body could therefore have major consequences on the water levels in nearby areas.	<i>Lower limit</i> : the peat body will be managed to minimise water loss from adjacent restored areas.
Water erosion and pressure Uncontrolled Storm water could cause erosion lowering restored water levels Investigations of the hydrology and morphology of the peat body have indicated that large areas of the peat body are closely connected. Drainage activities on any part of the peat body could therefore have major consequences on the water levels in nearby areas. No more than a 30 cm fall across dams or 10 m stand-off, 50 m at bog margin.	<ul> <li>Upper limit: No storm water damage to site.</li> <li>Lower limit:</li> <li>Upper limit: n/a</li> <li>Lower limit: Construct sufficient dams to control pressure build up.</li> <li>Upper limit: 30 cm fall without 10 m stand-off or 50 m at margin where fall to other land uses.</li> <li>Lower limit:</li> </ul>
<b>Climate change</b> Dams will aid the site to cope with negative hydrological caused by climate change by storing water on site.	<i>Upper limit</i> : No detrimental change to residence curves of water in peat. <i>Lower limit</i> :

F2 Water Quality	Nutrient-enriched and also polluted water has been channelled to run within the peat body because culverts have been cut through the hills that once contained the Moss allowing the marginal water levels to be lowered. This has had the effect of allowing marginal fen, swamp and carr woodland to be converted to agriculture. It also has the effect of causing the peat to decay and of increasing the spread of swamp, fen and carr species out onto the mire expanse.	Upper limit: Lower limit: buffer zones on mineral ground against the edge of the peat need to be established. And Diversion of the ditches containing nutrient-enriched water back to around the edge of the site
F3 Propagule availability	To restore severely damaged areas introduction of mire propagules may be necessary	<i>Upper limit:</i> <i>Lower limit:</i> 10% bogmoss 3 years after rehabilitation. Signs of M18 Erica tetralix- Sphagnum papillosum raised NVC community development after 15 years.
F4 Erosion	Visitor access to mire habitats must be controlled to limit damage to sensitive mire plants by trampling, as this can disrupt bryophyte hydrology and lead to erosion. The peat profile is also damaged by livestock poaching.	<i>Upper limit</i> : No damage to peat caused by vehicles/pedestrians or stock. <i>Lower limit</i> :
F5 Fire	The ash deposited by fires encourages inappropriate species such as birch, heather and purple moor-grass. Burning severely damages the peat, bog species and invertebrate, reptile, and at some times, ground-nesting bird communities. (Carefully controlled burning to clear the brash from scrub control and tree felling operations is acceptable)	<i>Upper limit</i> : No burning on the bog. <i>Lower limit</i> :
F6 Agriculture	The peat profile may be damaged by stock poaching.	<i>Upper limit</i> : Control grazing sufficient to remove poaching as an issue. <i>Lower limit</i> : Not required
	Addition of nutrients causes disintegration of the peat. This happens when manure or fertilizers or lime are added.	Upper limit: Ensure low input - sympathetic management on bog periphery & divert enriched waters around the edge of the bog. Lower limit: Not required

	Drainage necessary for agriculture, can make the peat surface subside, making the field surface wetter as it approaches the local water table leads to the need for expensive pumping systems or the deepening of ditches	Upper limit: On agricultural land within the site, distance from field surface to base of drain no deeper than 30cm. Lower limit:ButIf drain likely to impact on bog vegetation then: Upper limit: Water table above 10cm of peat surface for more than 70% of the year. Lower limit: Water table below 10cm of peat surface for more than 70% of the year.
F7 Owner and Occupier Objectives	Limitation on management towards the restoration of the raised bog - the personal objectives of owners and occupiers in and around the SSSI. Owner and occupiers activities may be preventing the restoration to raised bog. We will encourage them to work with us to achieve this restoration.	<i>Upper limit:</i> <i>Lower limit:</i> management should secure low-input low-intensity environmentally friendly farming on fields on and around the site
F8 Development	Development for housing, industrial, agricultural and other reasons can have a direct impact on the site through loss of habitat. It can also have indirect impacts through land use changes needed to allow the development to take place, such as, land drainage and changes to the drainage pattern and through possible increasing levels of pollutants affecting the site.	<i>Upper limit:</i> <i>Lower limit:</i> Inappropriate development should not be allowed & provisions to ensure developments that are allowed do not compromise the nature conservation interests of the site or hinder their positive management.
F9. Peat cutting	Peat cutting is not desirable as further drainage to the site would be required	site. Lower limit: Not required
F10. Moss gathering	Rare bryophytes maybe removed.	<i>Upper limit</i> : No gatherers on site. <i>Lower limit</i> : Not required
F11. Scrub and woodland management	Seeding from pine plantations onto the adjacent open bog is a major problem and has the potential for rapid colonisation after accidental fires.	<i>Upper limit:</i> <i>Lower limit:</i> existing conifer plantations should be cleared and not replaced.

F12 Atmospheric	Acid Deposition	Upper limit:
deposition	Deposition: 1.83 keq/ha/yr	Lower limit:
	Exceedance: 1.73 keq/ha/yr	Critical Load: 0.10 keq/ha/yr
(Data & further	Impacts: decomposition rate,	
information from: The Air	sulphate reduction, nitrate uptake,	
Pollution Information	organic acid production, damages	
System (APIS)	the bog vegetation, increases acid	
http://www.apis.ceh.ac.uk)	leeching of cell membranes in	
SJ487364	sphagnum thus increasing	
	evapotranspiration and reducing	
	photosynthesis, mobilizes Al3+	
	(aluminium) causing toxicity to	
	plants, reduce Potassium availability	
	to plants.	
	N Deposition	Upper limit:
	Deposition: 21.6 kg N/ha/year	Lower limit:
	Exceedance Ranges:	Critical Load Range:
	Raised and blanket bogs [16.6] to	Raised and blanket bogs: 5-10 kg
	[11.6] kg N/ha/year	N/ha/year
	Impacts: by shifting the balance	
	from bog mosses to grasses	
	resulting a increased $CO_2$ emission	

Other factors considered include -

- Land tenure There is lack of control (particularity in respect of land drainage) in areas outside of CCW/NE tenure and those areas not covered by Section 15 agreements.
- Legal constraints Licenses are required for land impounding/drainage/tree felling.
- Vehicular access The use of vehicles on the bogs could damage the peat and bog vegetation.
- Climate change Changes in the availability of water required for maintaining the bog hydrology.

# 5. ASSESSMENT OF CONSERVATION STATUS AND MANAGEMENT REQUIREMENTS

This part of the document provides:

- A summary of the assessment of the conservation status of each feature.
- A summary of the management issues that need to be addressed to maintain or restore each feature.

#### 5.1 Conservation Status and Management Requirements of Feature 1:

#### **Conservation Status of Feature 1**

Unfavourable: Recovering CCW monitoring Aug-06 (desk top exercise) CCW monitoring Aug-07 (field monitoring)

#### **Management Requirements of Feature 1**

Remove remaining conifer plantations. Control Scrub Invasion. Raise and maintain water levels. Agree appropriate management through agreements with Owner/occupiers on the site. Divert main drain around the periphery of the site.

## 6. ACTION PLAN: SUMMARY

This section takes the management requirements outlined in Section 5 a stage further, assessing the specific management actions required on each management unit. This information is a summary of that held in CCW's Actions Database for sites, and the database will be used by CCW and partner organisations to plan future work to meet the Wales Environment Strategy targets for sites.

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
1	001807	NE Fenn's Moss	This unit is considered to be under appropriate conservation management.	No
3	001808	Fenn's Moss - Section 2	Remove peat digging from site.	Yes
6	001809	Moss Villa - 1	This unit is considered to be under appropriate conservation management.	No
11	001810	Nook Lane Fields	This unit is considered to be under appropriate conservation management.	No
33	001811	Bettisfield - woodland	This unit is considered to be under appropriate conservation management.	No
35	001812	Mill Villa	This unit is considered to be under appropriate conservation management.	No
57	001813	Pools Ditch	This unit is considered to be under appropriate conservation management.	No
60	001814	Fenn's Wood - Pond 1	This unit is considered to be under appropriate conservation management.	No
89	001816	Roseville track	This unit is considered to be under appropriate conservation management.	No
94	001817	Moss Lane Holding	This unit is considered to be under appropriate conservation management.	No
95	001818	The Hollies - Garden	This unit is considered to be under appropriate conservation management.	No
96	001819	The Hollies - Field	This unit is considered to be under appropriate conservation management.	No
98	001820	Cambrian Cottage - drainage ditch	This unit is considered to be under appropriate conservation management.	No
102	001821	Moss Villa - Field 2	This unit is considered to be under appropriate conservation management.	No
104	001822	Woodland adjacent to Maelor Forest	This unit is considered to be under appropriate conservation management.	No
2	001823	Fenn's Moss - Section 3	Remove peat digging from site.	Yes
7	001824	Fenn's Moss - N railway 1	This unit is considered to be under appropriate conservation management.	No
9	001825	Cambrian Cottage - Fields	This unit is considered to be under appropriate conservation management.	No
15	001826	Maelor Forest - 1	Clear conifers on renewal of agreement.	Yes
36	001828	Cadney Farm	This unit is considered to be under appropriate conservation management.	No
56	001830	Fenn's Wood Farm - Fields	This unit is considered to be under appropriate conservation management.	No
90	001831	Roseville	This unit is considered to be under appropriate conservation management.	No

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
93	001832	Moss Cottage	This unit is considered to be under appropriate conservation management.	No
103	001833	Chapel Lane Traingle	This unit is considered to be under appropriate conservation management.	No
105	001834	Fenn's Woodland - N of railway small	This unit is considered to be under appropriate conservation management.	No
4	001835	Fenn's Moss - Section 1 (Main)	Divert the main drain to the periphery of the site. Currently running through the middle introducing eutrophicated & polluted water onto the bog.	Yes
16	001836	Lodge Farm - Large compartment	This unit is considered to be under appropriate conservation management.	No
37	001838	The Russetts - 2	This unit is considered to be under appropriate conservation management.	No
58	001840	Fenn's Wood - Traingle wood	This unit is considered to be under appropriate conservation management.	No
91	001841	The Russetts - 1	This unit is considered to be under appropriate conservation management.	No
92	001842	Platt lane - woodland	This unit is considered to be under appropriate conservation management.	No
5	001843	Disused railway line	This unit is considered to be under appropriate conservation management.	No
34	001844	Bettisfield Moss	This unit is considered to be under appropriate conservation management.	No
59	001846	Fenn's Wood - Long mile wood	This unit is considered to be under appropriate conservation management.	No
111	001847	Cambrian Cottage	This unit is considered to be under appropriate conservation management.	No
8	001848	Fenn's Moss - N railway 2	This unit is considered to be under appropriate conservation management.	No
12	001850	Cuckcoo's Corner - Wood and Willows	This unit is considered to be under appropriate conservation management.	No
46	001853	Maelor Forest - 2	Clear fell conifers off CCW land.	Yes
88	001854	The Russetts - woodland	This unit is considered to be under appropriate conservation management.	No
99	001856	Cambrian Cottage - disused railway line	This unit is considered to be under appropriate conservation management.	No
100	001857	Moss Villa - 2	This unit is considered to be under appropriate conservation management.	No
106	001858	Lodge Farm - Small compartment	This unit is considered to be under appropriate conservation management.	No
10	001859	Maelor Nursery	This unit is considered to be under appropriate conservation management.	No
14	001860	Cuckcoo's Corner woodland - 1	This unit is considered to be under appropriate conservation management.	No
62	001861	Manor House - adjacent	This unit is considered to be under appropriate conservation management.	No
97	001862	The Canal	This unit is considered to be under appropriate conservation management.	No

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
112	001863	Fenn's Woodland - N of railway large	This unit is considered to be under appropriate conservation management.	No
13	001864	Cuckcoo's corner field	This unit is considered to be under appropriate conservation management.	No
101	001865	Moss Villa - Field 1	This unit is considered to be under appropriate conservation management.	No
113	002960	Moss lane	This unit is considered to be under appropriate conservation management.	No
114	002969	Barnston -connery lane	This unit is considered to be under appropriate conservation management.	No

#### 7. GLOSSARY

This glossary defines the some of the terms used in this **Core Management Plan**. Some of the definitions are based on definitions contained in other documents, including legislation and other publications of CCW and the UK nature conservation agencies. None of these definitions is legally definitive.

- Action A recognisable and individually described act, undertaking or **project** of any kind, specified in section 6 of a **Core Management Plan** or **Management Plan**, as being required for the **conservation management** of a site.
- **Attribute** A quantifiable and monitorable characteristic of a **feature** that, in combination with other such attributes, describes its **condition**.
- **Common Standards Monitoring** A set of principles developed jointly by the UK conservation agencies to help ensure a consistent approach to **monitoring** and reporting on the **features** of sites designated for nature conservation, supported by guidance on identification of **attributes** and monitoring methodologies.
- **Condition** A description of the state of a feature in terms of qualities or **attributes** that are relevant in a nature conservation context. For example the condition of a habitat usually includes its extent and species composition and might also include aspects of its ecological functioning, spatial distribution and so on. The condition of a species population usually includes its total size and might also include its age structure, productivity, relationship to other populations and spatial distribution. Aspects of the habitat(s) on which a species population depends may also be considered as attributes of its condition.
- **Condition assessment** The process of characterising the **condition** of a **feature** with particular reference to whether the aspirations for its condition, as expressed in its **conservation objective**, are being met.

Condition categories		The <b>condition</b> of <b>feature</b> can be categorised, following <b>condition assessment</b> as one of the following <sup>2</sup> :		
		Favourable: maintained; Favourable: recovered; Favourable: un-classified Unfavourable: recovering; Unfavourable: no change; Unfavourable: declining; Unfavourable: un-classified Partially destroyed; Destroyed.		
Conservation managen	to <b>acti</b> <b>object</b> statuto party a sites. ( frame	Acts or undertaking of all kinds, including but not necessarily limited to <b>actions</b> , taken with the aim of achieving the <b>conservation objectives</b> of a site. Conservation management includes the taking of statutory and non-statutory measures, it can include the acts of any party and it may take place outside site boundaries as well as within sites. Conservation management may also be embedded within other frameworks for land/sea management carried out for purposes other than achieving the conservation objectives.		
Conservation objective	expres indica	The expression of the desired <b>conservation status</b> of a <b>feature</b> , expressed as a <b>vision for the feature</b> and a series of <b>performance indicators</b> . The conservation objective for a feature is thus a composite statement, and each feature has one conservation objective.		
	A description of the state of a <b>feature</b> that comprises both its <b>condition</b> and the state of the <b>factors</b> affecting or likely to affect it. Conservation status is thus a characterisation of both the current state of a feature and its future prospects.			
Conservation status assessment		The process of characterising the <b>conservation status</b> of a <b>feature</b> with particular reference to whether the aspirations for it, as expressed in its <b>conservation objective</b> , are being met. The results of conservation status assessment can be summarised either as 'favourable' (i.e. conservation objectives are met) or unfavourable (i.e. conservation objectives are not met). However the value of conservation status assessment in terms of supporting decisions about <b>conservation management</b> , lies mainly in the details of the assessment of feature <b>condition</b> , <b>factors</b> and trend information derived from comparisons between current and previous conservation status assessments.		
Core Management Pla	and a	W document containing the conservation objectives for a site summary of other information contained in a full site <b>gement Plan</b> .		

<sup>&</sup>lt;sup>2</sup> See JNCC guidance on Common Standards Monitoring <u>http://www.jncc.gov.uk/page-2272</u>

**Factor** Anything that has influenced, is influencing or may influence the **condition** of a **feature**. Factors can be natural processes, human activities or effects arising from natural process or human activities, They can be positive or negative in terms of their influence on features, and they can arise within a site or from outside the site. Physical, socio-economic or legal constraints on **conservation management** can also be considered as factors.

See condition and condition assessment

Favourable condition	See condition and condition assessment
Favourable conservation stat	tus See conservation status and conservation status assessment. <sup>3</sup>

- Feature The species population, habitat type or other entity for which a site is designated. The ecological or geological interest which justifies the designation of a site and which is the focus of conservation management.
- **Integrity** See site integrity

For your able condition

- **Key Feature** The habitat or species population within a **management unit** that is the primary focus of **conservation management** and **monitoring** in that unit.
- Management PlanThe full expression of a designated site's legal status, vision, features,<br/>conservation objectives, performance indicators and management<br/>requirements. A complete management plan may not reside in a single<br/>document, but may be contained in a number of documents (including in<br/>particular the Core Management Plan) and sets of electronically stored<br/>information.
- Management Unit An area within a site, defined according to one or more of a range of criteria, such as topography, location of **features**, tenure, patterns of land/sea use. The key characteristic of management units is to reflect the spatial scale at which **conservation management** and **monitoring** can be most effectively organised. They are used as the primary basis for differentiating priorities for conservation management and monitoring in different parts of a site, and for facilitating communication with those responsible for management of different parts of a site.
- **Monitoring** An intermittent (regular or irregular) series of observations in time, carried out to show the extent of compliance with a formulated standard or degree of deviation from an expected norm. In **Common Standards Monitoring**, the formulated standard is the quantified expression of favourable **condition** based on **attributes**.
- **Operational limits** The levels or values within which a **factor** is considered to be acceptable in terms of its influence on a **feature**. A factor may have both upper and lower operational limits, or only an upper limit or lower limit. For some factors an upper limit may be zero.
- **Performance indicators** The **attributes** and their associated **specified limits**, together with **factors** and their associated **operational limits**, which provide the standard against which information from **monitoring** and other sources is used to determine the degree to which the **conservation objectives** for a **feature** are being met. Performance indicators are

<sup>&</sup>lt;sup>3</sup> A full definition of favourable conservation status is given in Section 4.

part of, not the same as, conservation objectives. See also **vision for the feature**.

- Plan or projectProject: Any form of construction work, installation, development or other<br/>intervention in the environment, the carrying out or continuance of which is<br/>subject to a decision by any public body or statutory undertaker.<br/>Plan: a document prepared or adopted by a public body or statutory<br/>undertaker, intended to influence decisions on the carrying out of projects.<br/>Decisions on plans and projects which affect Natura 2000 and Ramsar sites<br/>are subject to specific legal and policy procedures.
- **Site integrity** The coherence of a site's ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it is designated.

Site Management Statement (SMS) The document containing CCW's views about the management of a site issued as part of the legal notification of an SSSI under section 28(4) of the Wildlife and Countryside Act 1981, as substituted.

#### **Special Feature** See feature.

**Specified limit** The levels or values for an **attribute** which define the degree to which the attribute can fluctuate without creating cause for concern about the **condition** of the **feature**. The range within the limits corresponds to favourable, the range outside the limits corresponds to unfavourable. Attributes may have lower specified limits, upper specified limits, or both.

Unit See management unit.

**Vision for the feature** The expression, within a **conservation objective**, of the aspirations for the **feature** concerned. See also **performance indicators**.

**Vision Statement** The statement conveying an impression of the whole site in the state that is intended to be the product of its **conservation management**. A 'pen portrait' outlining the **conditions** that should prevail when all the **conservation objectives** are met. A description of the site as it would be when all the **features** are in **favourable condition**.