Welsh Government

M4 Corridor around Newport

Environmental Statement Supplement Volume 3: Appendix S10.2

Summary of SSSI Features & Feature Sheets

M4CaN-DJV-EBD-ZG_GEN-AX-EN-0041

At Issue | September 2016

Contents

Page

1 Summary of SSSI Features and Feature Sheets

1

Annexes

Annex A - St Brides SSSI Feature Sheets

Annex B – Nash and Goldcliff SSSI Feature Sheets

Annex C – Whitson SSSI Feature Sheets

Annex D - Redwick and Llandevenny Feature Sheets

Statement of Purpose

The SSSI Feature Sheets which are Annexes A-D of this Supplementary Appendix were provided by Natural Resources Wales (NRW) after the submission of the Environmental Statement in March 2016.

It can be seen that the key features of the Gwent Levels SSSIs as set out in ES Chapter 10 based on the Site Management Statements and citations available at that time (comprising reen and ditch habitat, and a range of aquatic and marginal plant species, aquatic invertebrates and shrill carder bee) are essentially as set out in the SSSI Feature Sheets, although there are differences in the lists of key plant and invertebrate species between the individual SSSIs.

August 2016

1 Summary of Gwent Levels SSSI Features and Feature Sheets

1.1 Summary of Gwent Levels SSSI Features

Features as Described in ES Chapter 10	SSSI Features Sheet				
Gwent Levels - St Brides SSSI					
Reen and ditch habitat	A. Terrestrial:				
	Standing Water				
	Ditch/ditches				
	Other				
Plant species including:	B. Plant				
Ranunculus trichophyllus	Potamogeton trichoides				
Potamogeton berchtoldii	D. Assemblage				
Lathyrus nissolia Thalictrum flavum	Assemblage of Aquatic and Marginal RDB &				
i nalictrum tlavum	Nationally Scarce Vascular Plants:				
	Hydrocharis morsus-ranae Potamogeton trichoides				
	Oenanthe fistulosa				
	Sagittaria sagittifiolia				
Insects and other invertebrates	C. Animal				
(aquatic) including:	Coenagrion pulchellum				
Chrysogaster macquarti	Odontomyia ornata				
Hydaticus transversalis	Hydrophilus piceus				
Stenomicra cogani	Plateumaris braccata				
	Hydaticus transversalis				
	D. Assemblage				
	Grazing Levels Invertebrate assemblage				
	(See list at Annex A)				
Shrill carder bee	C. Animal				
	Shrill carder bee				
Gwent Levels - Nash and Goldclift					
Reen and ditch habitat	A. Terrestrial				
	Standing water				
	Ditch/ditches				
	Swamp Other				
Plant Species including:	B. Plant				
Wolffia arrhiza	Wolffia arrhiza				
Ceratophyllum submersum	Potamogeton trichoides				
Ceratophyllum demersum	D. Assemblage				
	Assemblage of Aquatic and Marginal RDB &				
	Nationally Scarce Vascular Plants:				
	Wolffia arrhiza				
	Hydrocharis morsus-ranae				
	Oenanthe fistulosa				
	Potamogeton trichoides				
	Ceratophyllum submersum				
Insects and other invertebrates	C. Animal				
(aquatic):	Hydaticus transversalis				
Odontomyia ornata	Hydrophilus piceus				
Oplodontha viridula	Odontomyia ornata				
Hydaticus transversalis	D. Assemblage				
	Grazing levels invertebrate assemblage (See list at Annex B)				
Shrill carder bee	(Occ list at Allilex D)				
On a carder bee					

2

August 2016

	SSSI Features Sheet
Chapter 10 Gwent Levels – Whitson SSSI	
Reen and ditch habitat	A. Terrestrial
	Standing water
	Ditch/ditches
	Swamp
	Other
Plant species including:	B. Plant
Potamogeton trichoides	Potamogeton trichoides
Carex elata	Carex elata
Sagittaria sagittifolia	D. Assemblage
	Assemblage of Aquatic and Marginal RDB &
	Nationally Scarce Vascular Plants:
	Wolffia arrhiza
	Hydrocharis morsus-ranae
	Potamogeton trichoides
	Oenanthe fistulosa
	Sagittaria sagittifiolia
Insects and other invertebrates	C. Animal
(aquatic) including:	Coenagrion pulchellum
Anthomyza bifasciata	Hydaticus transversalis
Coptophlebia volucris	Hydrophilus piceus
Hydrophilus piceus.	Limnoxenus niger
	Odontomyia ornata
	D. Assemblage
	Grazing levels invertebrate assemblage
Shrill carder bee	(See list at Annex C) C. Animal
Shrill carder bee	Shrill carder bee
Gwent Levels – Redwick and Llan	
Reen and ditch habitat	A. Terrestrial
Troom and altern nation	Standing water
	Ditch/ditches
	Other
Plant species including:	B. Plant
Myriophyllum verticillatum	Potamogeton trichoides
Ranunculus baudotii	D. Assemblage
	Assemblage of Aquatic and Marginal RDB &
	Nationally Scarce Vascular Plants:
	Wolffia arrhiza
	Hydrocharis morsus-ranae
	Oenanthe fistulosa
	Sagittaria sagittifolia
	Potamogeton trichoides
Insects and other invertebrates	C. Animal
(aquatic) including:	Hydaticus transversalis
Chalcis sispes	Hydrophilus piceus
Scirtes orbicularis	Odontomyia ornata
Pharhelophilus consimilis.	Limnoxenus niger
	D. Assemblage
	Grazing levels invertebrate assemblage
Oberille a galanti	(See list at Annex D)
Shrill carder bee	

Annexes

Annex A – St Brides SSSI Feature Sheets

Hectares r Ilonydd) 74	Guidelines/Reference
	Guidelines/Reference
	Guidelines/Referenc
	Guidelines/Referenc
	Guidelines/Referenc
r llonydd) 74	
r llonydd) 74	
	6.5.2.1;6.5.2.2;6.5.2.3
74	6.5.2.1;6.5.2.2;6.5.2.3
/4	
Aroll) 1249	Doundon
	Boundary
1022	
Number	Guidelines/Reference
	1100
	11.3.6
Number	Guidelines/Reference
	19.2.2.2
	17.3.4.5
	17.3.4.5
	17.3.4.6
	17.3.4.6
	17.3.4.5
0	
Amount	Guidelines/Referenc
efn s	17.3.1
rts()()	6.5.2.2
	6.5.2.2
	6.5.2.2
	6.5.2.2
	6.5.2.2
	Number O O O O O O O O O O O O O O O O O O

H. Notes

Notes

Area of ditch derived from measured map of ditch length, assuming standard width , as follows: 41523m of reen at 7m width = 29ha 151939m of ditch at 3m width = 45ha Ditch width can vary depending on rainfall, state of tide and method of me asurement. Other habitats added to bring area up to site area, includes a range of non-qualifying habitats such as roads, buildings, improved grassland etc. T his land is included within the SSSI because its management can have a significa nt impact on the conservation status of the ditches and reens. Invertebrate dat a added on advice of CCW invertebrate specialists. Bombus is not a notified fea ture, but does qualify. Potamogeton trichoides added as an independently qualif ying feature on CCW specialist advice. Wolfia arrhiza has not been recorded on this SSSI, but if it were, it would form part of the plant assemblage. It has b een recorded at other sites on the Gwent Levels In addition, the following coun ty and regional rarities have been recorded at this site: Bidens cernua, Carex pseudocyperus, Catabrosa aquatica, Ceratophyllum demersum, Impatiens capensis, L emna polyrrhiza, Oenanthe aquatica, Potamogeton berchtoldii, P. pusillus, Ranunc ulus trichophyllus, Sparganium emersum and Zannichellia palustris.

Annex B – Nash and Goldcliff SSSI Feature Sheets

SSSI Feature Sheet

Gwent Levels - Nash and Goldcliff(SSSI)

A. Terrestrial

Area	of	Search:	GWENT	

CCW phase 1	NVC	Feature Description	Hectares	Guidelines/Reference	Notified	Qualified
Terrestrial - Independent						
G.1		Standing water()(Dwr llonydd)	49.5	6.5.2.1;6.5.2.2;6.5.2.3	Y	Y
	XG07	Ditch/ditches	49.5	6.5.2.1;6.5.2.2;6.5.2.3		
Total Terrestrial - Independent			49.5			
Terrestrial - Complement	ary					
F.1		Swamp()(Siglen)	17.2	Part B 6.3		
Total Terrestrial - Complementary			17.2			
Terrestrial - Other		***				
J.5		Other: Others()(Arall: Arall)	887.3	Boundary		
Total Terrestrial - Other			887.3			
Total Terrestrial - GWENT			954			
Total Terrestrial			954			

B. Plant

Number	Guidelines/Reference	Notified	Qualified
	11.3.6		Υ
	11.3.6		Υ
0			
0			
0		1	
	0 0 0	11.3.6	11.3.6

C. Animal

Number	Guidelines/Reference	Notified	Qualified
	17.3.4.5	Y	Υ
	17.3.4.5	Y	Y
	17.3.4.5	Y	Υ
0			
0			
0			
	0 0 0	17.3.4.5 17.3.4.5	17.3.4.5 Y 17.3.4.5 Y

D. Assemblage

Feature Description	Amount	Guidelines/Reference	Notified	Qualified
Grazing levels invertebrate assemblage(Grazing levels invertebrate assemblage)(C		17.3.1	Y	Y
asgliad o greaduriaid di-asgwrn-cefn sy'n gysylltiedig a lefelau pori)				
Assemblage of Aquatic and Marginal RDB & Nationally Scarce		6.5.2.2		Υ
Vascular Plants(Assem				
blage of Aquatic and Marginal RDB & Nationally Scarce Vascular				
Plants)(Casgliad				
o Blanhigion Fasgwlaidd Dyfrol ac Ymylol a restrwyd yn yr RDB ac a				

gofnodwyd yn			
Anfynych yn Genedlaethol)			
Wolffia arrhiza		6.5.2.2	
Hydrocharis morsus-ranae		6.5.2.2	
Oenanthe fistulosa		6.5.2.2	
Potamogeton trichoides		6.5.2.2	
Ceratophyllum submersum		6.5.2.2	
Total Assemblage	0		
G. Data Source			
G. Data Source H. Notes			

Notes

The areas of the ditch habitat have been calculated from the lenths of ditch and reen, and multiplying by an estimated average width. Actual area of ditch habi tat will depend on rainfall, state of tide and method of calculating ditch width . The figures used were: 26455m of reen at 7m width = 18.5ha 104789m of ditch at 3m width = 31ha Ditch lengths come from mapinfo layer, and do not take acco unt of ditches shared between neighbouring SSSIs. 'Other' habitat includes a ra nge of non-qualifying habitats such as roads, buildings, improved grassland etc. This is included because the management of this land can have a significant im pact on the conservation status of the ditches and reens. The SSSI formerly had lapwing, redshank, Cetti's warbler and avocet as independently qualifying featu res, but these now fall within the Newport Wetlands SSSI, following boundary ame ndments in 2010. Invertebrate qualifying species taken from list suppiled by CC W invertebrate specialists Wolffia arrhiza added as feature following CCW speci alist advice. The species qualifies as an independent feature here because it i s a particularly good population. The following species occur at this site, t hat are part of the of the Severn estuary SPA bird assemblage: gadwall, wigeon, shoveler, pochard, shelduck, dunlin, redshank and curlew.. These do not occur in sufficient numbers to qualify as SSSI features on this SSSI. In addition, a number of county and regional rariteis have been recorded at this site: Bidens cernua, Butomus umbellatus, Carex pseudocyperus, Ceratophyllum demersum, Lemna polyrrhiza, Potamogeton berchtoldii, P. pusillus, Ranunculus circinatus and Zann ichellia palustris. Otter are known to occur regularly. They are not considere d an SSSI feature, because breeding on the SSSI has not been proved.

Annex C – Whitson SSSI Feature Sheets

SSSI Feature Sheet

Gwent Levels - Whitson(SSSI)

A. Terrestrial

Area of Search: GWENT

CCW phase 1	NVC	Feature Description	Hectares	Guidelines/Reference	Notified	Qualified
Terrestrial - Indepe	ndent					
G.1		Standing water()(Dwr Ilonydd)	49	4.3.1;4.3.2;6.5.2.1;6.5.2.2;6.5.2.3	Y	Υ
	XG07	Ditch/ditches	49	6.5.2.1;6.5.2.2;6.5.2.3		
Total Terrestrial - Independent			49	×		
Terrestrial - Other						
J.5		Other: Others()(Arall: Arall)	877.4	Boundary		
Total Terrestrial - Other			877.4			
Total Terrestrial - GWENT			926.4			
Total Terrestrial			926.4			

B. Plant

Feature Description	Number	Guidelines/Reference	Notified	Qualified
Plant - Independent				
Potamogeton trichoides(Hairlike Pondweed)(Dyfrllys Blewynnaidd)		11.3.6		Y
Carex elata(Tufted Sedge)(Hesgen Duswog)		11.3.6		Υ
Total Plant - Independent	0			
Total Plant -	0			
Total Plant	0			

C. Animal

Feature Description	Number	Guidelines/Reference	Notified	Qualified
Animal - Independent				
Bombus sylvarum(Shrill Carder Bee)(Cardwenynen Fain)		17.3.4.6	N	Υ
Coenagrion pulchellum(Variable Damselfly)(Coenagrion Amrywiol)		19.2.2.1	Y	Υ
Hydaticus transversalis(a water beetle)(chwilen ddwr)		17.3.4.5	Υ	Υ
Hydrophilus piceus(Great Silver Water Beetle)(Chwilen Ddwr Fawr Arian)		17.3.4.5	Y	Y
Limnoxenus niger(a scavenger water beetle)(chwilen)		17.3.4.6	Y	Υ
Odontomyja ornata(a soldierfly)(pryf soldiwr)		17.3.4.5	Y	Υ
Total Animal - Independent	0			
Total Animal -	0			
Total Animal	0			

D. Assemblage

Feature Description	Amount	Guidelines/Reference	Notified	Qualified
Grazing levels invertebrate assemblage(Grazing levels		17.3.1	Υ	Y
invertebrate assemblage)(C				
asgliad o greaduriaid di-asgwrn-cefn sy'n gysylltiedig a				
lefelau pori)				
Assemblage of Aquatic and Marginal RDB & Nationally		6.5.2.2		Y
Scarce Vascular Plants(Assem				

		I .	
	6.5.2.2		
	6.5.2.2		
	6.5.2.2		
	6.5.2.2		
	6.5.2.2		
0			
	0	6.5.2.2 6.5.2.2 6.5.2.2 6.5.2.2	6.5.2.2 6.5.2.2 6.5.2.2 6.5.2.2

tate of tide, how ditch width is measured etc. This figure includes ditches tha t may form boundaries with adjacent SSSIs. This SSSI formerly had a standing wa ter (brackish) feature, but this was transferred to the Newport Wetlands SSSI fo llowing boundary amendments in 2010. The 'other' habitat includes a range of no n-qualifying habitats such as roads, improved grassland, buildings etc. It also includes an unknown area of marshy grassland, thought to be a complementary fea ture. This land is included within the SSSI because its management can have a s ignificant impact on the conservation status of the ditches and reens. Inverteb rate species are included on the advice of CCW invertebrate specialists. Bombus is not a notified feature, but is qualifying. Potamogeton trichoides and Carex elata added as features following CCW specialist advice. This SSSI formerly ha d several independently qualifying bird features, but these were transferred to the Newport Wetlands SSSI following boundary amendments in 2010. The following species that form part of the Severn Estuary SPA all occur at this site: Bewick 's swan, gadwall, wigeon, shoveler, pochard, shelduck, dunlin, redshank and curl ew. They do not occur in sufficient numbers to qualify as features on this SSSI . Otter occur regularly on the SSSI, but have not been proved to breed. If bre eding was proved, this species would become an SSSI feature. The following regi onal and county rarities have been recorded on this SSSI: Catabrosa aquatica, C eratophyllum demersum, Lemna polyrrhiza, Potamogeton berchtoldii, P. pusillus, R anunculus circinatus, R. trichophyllus, Rumex palustris, Samolus valerandi and Z annichellia palustris.

Annex D – Redwick and Llandevenny SSSI Feature Sheets

SSSI Feature Sheet	t			1
Gwent Levels - Red	wick and L	landevenny(SSSI)	ži.	
A. Terrestrial				
Area of Search: GWENT				
CCW phase 1	CCW NVC	Feature Description	Hectares	Guidelines/Reference
Terrestrial - Independent				
G.1		Standing water()(Dwr llonydd)	52	6.5.2.1;6.5.2.2;6.5.2.3
	XG07	Ditch/ditches		6.5.2.1;6.5.2.2;6.5.2.3
Total Terrestrial - Independent			52	
Terrestrial - Other				
J.5		Other: Others()(Arall: Arall)	888	Boundary
Total Terrestrial - Other			888	
Total Terrestrial - GWENT			940	
Total Terrestrial			940	
B. Plant				
Feature Description			Number	Guidelines/Reference
Plant - Independent				
Potamogeton trichoides(Hairlike Por	ndweed)(Dyfrllys	blewynnaidd)		11.3.6
Total Plant - Independent			0	
Total Plant -			0	
Total Plant			0	
Feature Description			Number	Guidelines/Reference
Animal - Independent		Ā.		
Hydaticus transversalis(a water beet				17.3.4.5
Hydrophilus piceus(Great Silver Water Beetle)(Chwilen ddwr fawr arian)				17.3.4.5
Odontomyia ornata(a soldierfly)(pryf soldiwr)				17.3.4.5
Limnoxenus niger(a scavenger wate	r beetle)(chwilen).		17.3.4.6
Total Animal - Independent			0	
Total Animal -			0	
Total Animal			0	
D. Assemblage				
Feature Description			Amount	Guidelines/Reference
Grazing levels invertebrate assemble	age()(Casgliad o	greaduriaid di-asgwrn-cefn s		17.3.1
y'n gysylltiedig a lefelau pori)				0500
Assemblage of Aquatic and Margina	I KDB & National	ly Scarce Vascular Plants()()		6.5.2.2
Wolffia arrhiza				6.5.2.2
Hydrocharis morsus-ranae				6.5.2.2
Oenanthe fistulosa				6.5.2.2
Sagittaria sagittifolia				6.5.2.2 6.5.2.2
Potamogeton trichoides			0	0.5.2.2
Total Assemblage		7.	U	
F. Geology				
G. Data Source				

H. Notes

Notes

The areas for the ditch habitats have been calculated by multiplying the length by an estimate of average width, as follows: Reens 33674m at 7m width = 23.5ha Ditches 98207m at 3m width = 29ha Ditch area will vary depending on rainfall, s tate of tide and how ditch width is measured. 'Other' habitats include a range of non-qualifying habitats such as roads, buildings, improved grassland etc. Th is is included within the SSSI because the management of this land can have a si gnificant impact on the conservation status of the ditches and reens. Invertebr ate species are those suggested by CCW invertebrate specialists. Freshwater pla nt assemblage included on CCW Freshwater specialist advice. Gwent Levels - Redw ick and Llandevenny also supports the following county and regional rarities: Al isma lanceolatum, Bidens cornua, Carex pseudocyperus, Catabrosa aquatica, Cerato phyllum demersum, Lemna polyrhiza, Potamogeton berchtoldii, P. pusillus, Ranuncu lus circinatus and Zannichellia palustris. Myriophyllum verticillatum has not b een recorded on this SSSI, but has been noted on the adjacent Magor Marsh SSSI. If this species were to be discovered at Gwent Levels - Redwick and Llandevenny, it would be part of the plant assemblage.