European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC)

Fourth Report by the United Kingdom under Article 17

on the implementation of the Directive
from January 2013 to December 2018

Conservation status assessment for the habitat:

H3130 - Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*

UNITED KINGDOM

IMPORTANT NOTE - PLEASE READ

- The information in this document represents the UK Report on the conservation status of this habitat, submitted to the European Commission as part of the 2019 UK Reporting under Article 17 of the EU Habitats Directive.
- It is based on supporting information provided by the geographically-relevant Statutory Nature Conservation Bodies, which is documented separately.
- The 2019 Article 17 UK Approach document provides details on how this supporting information contributed to the UK Report and the fields that were completed for each parameter.
- The reporting fields and options used are aligned to those set out in the European Commission guidance.
- Maps showing the distribution and range of the habitat are included (where available).
- Explanatory notes (where provided) are included at the end. These provide additional audit trail information to that included within the UK assessments. Further underpinning explanatory notes are available in the related country-level and/or UK offshore-level reports.
- Some of the reporting fields have been left blank because either: (i) there was insufficient information to complete the field; and/or (ii) completion of the field was not obligatory.
- The UK-level reporting information for all habitats and species is also available in spreadsheet format.

Visit the JNCC website, https://jncc.gov.uk/article17, for further information on UK Article 17 reporting.

Report on the main results of the surveillance under Article 17 for Annex I habitat types (Annex D)

NATIONAL LEVEL

1. General information

1.1 Member State	**UK**
1.2 Habitat code	**3130 - Oligotrophic to mesotrophic standing waters with vegetation of the Lit**

2. Maps

2.1 Year or period	1983-2017
2.3 Distribution map	Yes
2.3 Distribution map Method used	Based mainly on extrapolation from a limited amount of data
2.4 Additional maps	No

BIOGEOGRAPHICAL LEVEL

3. Biogeographical and marine regions

3.1 Biogeographical or marine region where the habitat occurs	**Atlantic (ATL)**
3.2 Sources of information	England Hughes M, Hornby DD, Bennion H, Kernan, M, Hilton J et al. (2004) The development of a GIS-based inventory of standing waters in Great Britain together with a risk-based prioritisation protocol. Water, Air and Soil Pollution: Focus 4:73-84. Williams, P., Biggs, J., Crowe, A., Murphy, J., Nicolet, P., Weatherby, A., Dunbar M., (2010) Ponds Report from 2007. CS Technical Report No. 7/07 Carvalho, L. and Moss, B. (1998) Lake SSSIs subject to eutrophication: environmental audit. English Nature Freshwater Series No. 3. Peterborough: English Nature. Environment Agency (2016) Water Framework Directive Surface Water Bodies in England: Classification Status and Objectives - Cycle 2, data from 2013 -2016 Natural England CMSi condition data Mainstone C.,& Burn A. (2011) Relationships between ecological objectives and associated decision-making under the Habitats and Water Framework Directives. Discussion paper, Natural England. Burgess, A, Goldsmith, B and Goodrich, S. (2014) Interpretation of Water Framework Directive Macrophyte Data for CSM Condition Assessment. Report to Natural England Maberly, S.C., De Ville, M.M., Thackeray, S. J., Ciar, D., Clarke, M., Fletcher, J. M., James, J.B., Keenan P. Mackay, E.B., Patel, M., Tanna, B., Winfield, I. J., Bell, K., Clark, R., Jackson, A., Muir, J., Ramsden, R., Thompson, J., Titterington, H., Webb, P. 2016 A survey of the status of the lakes of the English Lake District: The Lakes Tour 2015.Report to United Utilities. Tomlinson, M., Perrow M., Harwood A., Berridge R., (2017) Quantifying fish populations in SSSI lakes phase 2: site-specific reporting of the role of fish in lake management. Report to Natural England. Hall, R. A. (2018) Explanatory notes for the standing water analysis and reporting for Article 17 round 4. Natural England paper. Scotland Previous report SCM Database Wales Arts, GHP. 2002. Deterioration of Atlantic soft water macrophyte communities

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Habitats Directive and Water Framework Directive. DO1/13/483427

4. Range

4.1 Surface area (in km²)	170429.35	
4.2 Short-term trend Period	2007-2018	
4.3 Short-term trend Direction	Stable (0)	
4.4 Short-term trend Magnitude	a) Minimum	b) Maximum
4.5 Short-term trend Method used	Based mainly on extrapolation from a limited amount of data	
4.6 Long-term trend Period		
4.7 Long-term trend Direction		
4.8 Long-term trend Magnitude	a) Minimum	b) Maximum
4.9 Long-term trend Method used		
4.10 Favourable reference range	a) Area (km²)	170429.35
	b) Operator	
	c) Unknown	No
	d) Method	The FRR is approximately equal to the current range area. The approach taken to set the FRR is explained in the 2007 and 2013 UK Article 17 habitat reports (see http://jncc.defra.gov.uk/page-4064 and http://jncc.defra.gov.uk/page-6563).
4.11 Change and reason for change in surface area of range	Improved knowledge/more accurate data	
	The change is mainly due to:	Improved knowledge/more accurate data
4.12 Additional information		

5. Area covered by habitat

5.1 Year or period	1983-2018			
5.2 Surface area (in km²)	a) Minimum	b) Maximum	c) Best single value	333.91
5.3 Type of estimate	Best estimate			
5.4 Surface area Method used	Based mainly on extrapolation from a limited amount of data			
5.5 Short-term trend Period	2007-2018			
5.6 Short-term trend Direction	Stable (0)			
5.7 Short-term trend Magnitude	a) Minimum	b) Maximum	c) Confidence interval	
5.8 Short-term trend Method used	Based mainly on expert opinion with very limited data			
5.9 Long-term trend Period				
5.10 Long-term trend Direction				
5.11 Long-term trend Magnitude	a) Minimum	b) Maximum	c) Confidence interval	
5.12 Long-term trend Method used				
5.13 Favourable reference area	a) Area (km²)			
	b) Operator	Approximately equal to (≈)		
	c) Unknown	No		
	d) Method	The FRA is approximately equal to the current area. The approach taken to set the FRA is explained in the 2007 and 2013 UK Article 17 habitat reports (see http://jncc.defra.gov.uk/page-4064 and http://jncc.defra.gov.uk/page-6563).		

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5.14 Change and reason for change in surface area of range	Improved knowledge/more accurate data The change is mainly due to: Improved knowledge/more accurate data
5.15 Additional information	

6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km^2)	Minimum	97.36	Maximum
	b) Area in not-good condition (km^2)	Minimum	80.11	Maximum
	c) Area where condition is not known (km^2)	Minimum	31.15	Maximum
6.2 Condition of habitat Method used	Based mainly on extrapolation from a limited amount of data			
6.3 Short-term trend of habitat area in good condition Period	2007-2018			
6.4 Short-term trend of habitat area in good condition Direction	Uncertain (u)			
6.5 Short-term trend of habitat area in good condition Method used	Insufficient or no data available			
6.6 Typical species	Has the list of typical species changed in comparison to the previous reporting period? No			
6.7 Typical species Method used				
6.8 Additional information	There is insufficient information to report on the maximum area of habitat in unfavourable (not good) condition. Nevertheless, the information available indicates at least 40% of the total habitat area is in unfavourable condition.			

7. Main pressures and threats

7.1 Characterisation of pressures/threats

Pressure	Ranking
Extensive grazing or undergrazing by livestock (A10)	M
Forestry activities generating pollution to surface or ground waters (B23)	M
Hydropower (dams, weirs, run-off-the-river), including infrastructure (D02)	M
Sports, tourism and leisure activities (F07)	M
Other invasive alien species (other then species of Union concern) (I02)	H
Mixed source pollution to surface and ground waters (limnic and terrestrial) (J01)	H

Threat	Ranking
Extensive grazing or undergrazing by livestock (A10)	M
Forestry activities generating pollution to surface or ground waters (B23)	M
Hydropower (dams, weirs, run-off-the-river), including infrastructure (D02)	M
Sports, tourism and leisure activities (F07)	M

Other invasive alien species (other then species of Union concern) (I02)	H
Mixed source pollution to surface and ground waters (limnic and terrestrial) (J01)	H
Droughts and decreases in precipitation due to climate change (N02)	M

7.2 Sources of information

7.3 Additional information

8. Conservation measures

8.1 Status of measures	a) Are measures needed?	Yes
	b) Indicate the status of measures	Measures identified and taken
8.2 Main purpose of the measures taken		Maintain the current range, population and/or habitat for the species
8.3 Location of the measures taken		Both inside and outside Natura 2000
8.4 Response to the measures		Medium-term results (within the next two reporting periods, 2019-2030)

8.5 List of main conservation measures

Reduce diffuse pollution to surface or ground waters from agricultural activities (CA11)
Reduce diffuse pollution to surface or ground waters from forestry activities (CB10)
Reduce impact of hydropower operation and infrastructure (CC04)
Reduce impact of outdoor sports, leisure and recreational activities (CF03)
Reducing the impact of (re-) stocking for fishing and hunting, of artificial feeding and predator control (CG03)
Management, control or eradication of other invasive alien species (CI03)
Reduce impact of mixed source pollution (CJ01)
Restore habitats impacted by multi-purpose hydrological changes (CJ03)
Adopt climate change mitigation measures (CN01)
Implement climate change adaptation measures (CN02)

8.6 Additional information

9. Future prospects

9.1 Future prospects of parameters	a) Range	Good
	b) Area	Good
	c) Structure and functions	Bad
9.2 Additional information		Future trend of Range is Overall stable; Future trend of Area is Overall stable; and Future trend of Structure and functions is Overall stable

10. Conclusions

10.1. Range	Favourable (FV)
10.2. Area	Favourable (FV)

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10.3. Specific structure and functions (incl. typical species)	Unfavourable - Bad (U2)
10.4. Future prospects	Unfavourable - Bad (U2)
10.5 Overall assessment of Conservation Status	Unfavourable - Bad (U2)
10.6 Overall trend in Conservation Status	Stable (=)
10.7 Change and reasons for change in conservation status and conservation status trend	a) Overall assessment of conservation status Genuine change The change is mainly due to: Genuine change b) Overall trend in conservation status No information on nature of change The change is mainly due to:
10.8 Additional information	Conclusion on Range reached because: (i) the short-term trend direction in Range surface area is stable; and (ii) the current Range surface area is approximately equal to the Favourable Reference Range. Conclusion on Area covered by habitat reached because: (i) the short-term trend direction in Area is stable; and (ii) the current Area is approximately equal to the Favourable Reference Area. Conclusion on Structure and functions reached because habitat condition data indicates that more than 25% of the habitat is in unfavourable (not good) condition. Conclusion on Future prospects reached because: (i) the Future prospects for Range are good; (ii) the Future prospects for Area covered by habitat are good; and (iii) the Future prospects for Structure and functions are bad. Overall assessment of Conservation Status is Unfavourable-bad because one or more of the conclusions is Unfavourable-bad. Overall trend in Conservation Status is based on the combination of the short-term trends for Range - stable, Area covered by habitat - stable, and Structure and functions - decreasing. The Overall assessment of Conservation Status has changed between 2013 and 2019 because the conclusions for Structure and functions and Future prospects have changed from Unfavourable-inadequate to Unfavourable-bad. The Overall trend in Conservation Status has changed between 2013 and 2019 because the Structure and functions trend has changed from increasing to uncertain [note that the reason for change is due to less information/accuracy or certainty in the information available].

11. Natura 2000 (pSCIs, SCIs, SACs) coverage for Annex I habitat types

11.1 Surface area of the habitat type inside the pSCIs, SCIs and SACs network (in km² in biogeographical/ marine region)	a) Minimum b) Maximum c) Best single value 116.83
11.2 Type of estimate	Minimum
11.3 Surface area of the habitat type inside the network Method used	Based mainly on extrapolation from a limited amount of data
11.4 Short-term trend of habitat area in good condition within the network Direction	Decreasing (-)

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11.5 Short-term trend of habitat area in good condition within network Method used	Based mainly on extrapolation from a limited amount of data
11.6 Additional information	

12. Complementary information

12.1 Justification of % thresholds for trends	
12.2 Other relevant information	

Distribution Map

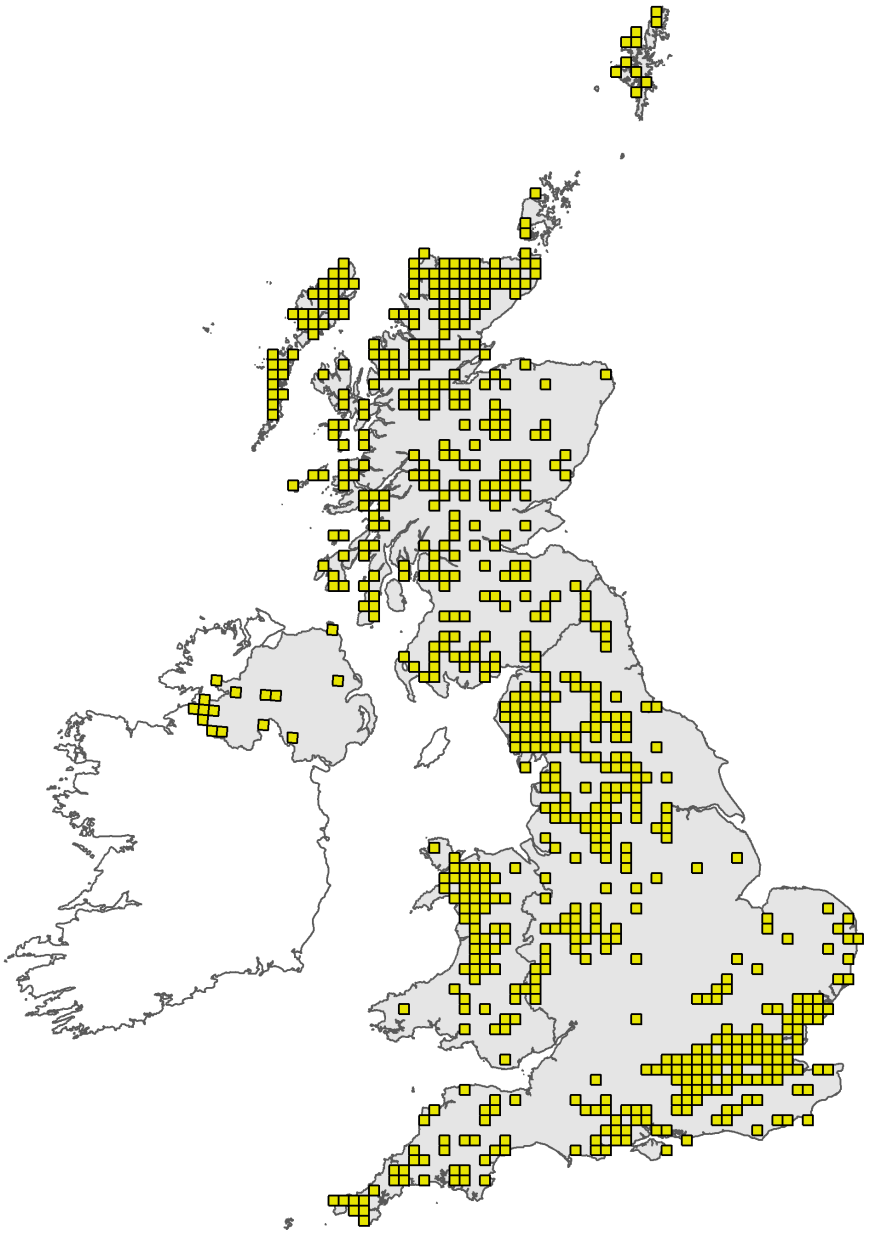

Figure 1: UK distribution map for H3130 - Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

The 10km grid square distribution map is based on available habitat records which are considered to be representative of the distribution within the current reporting period. For further details see the 2019 Article17 UK Approach document.

Range Map

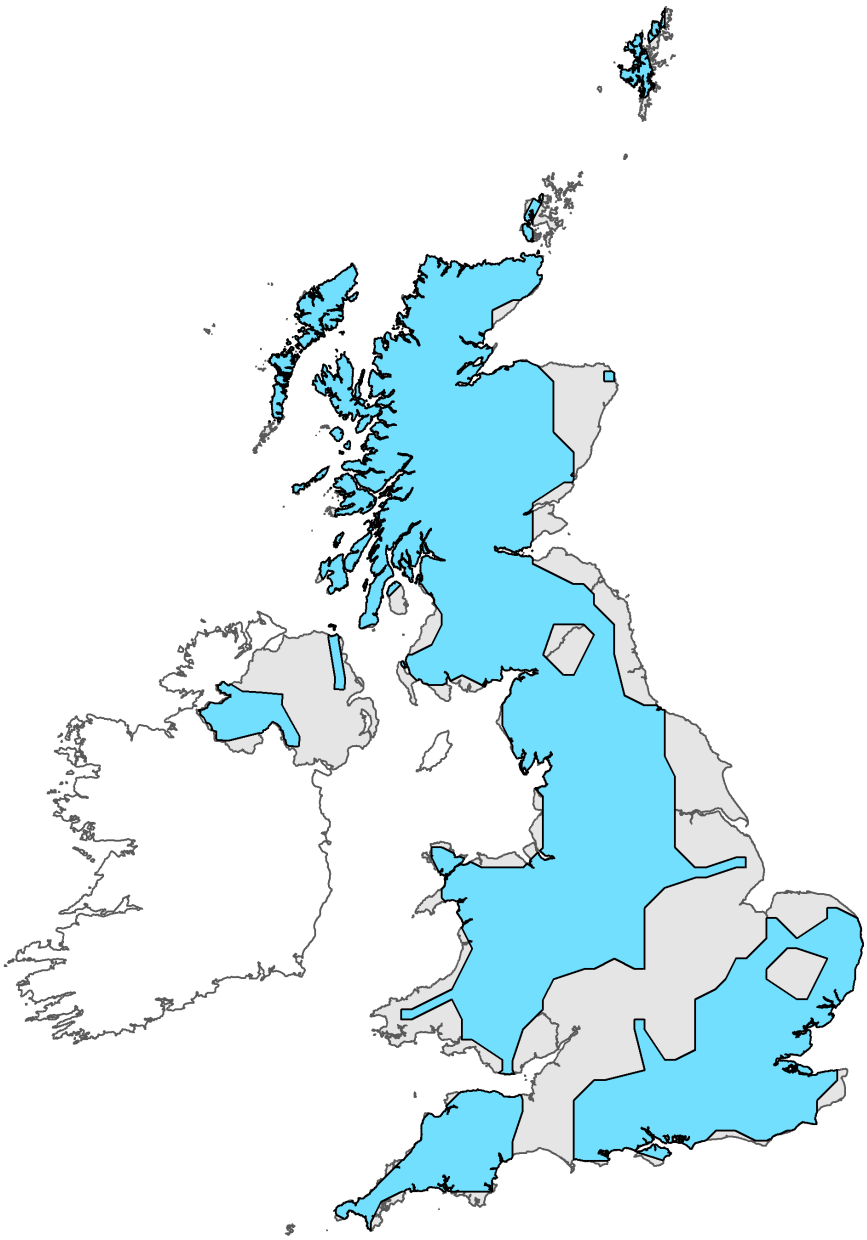

Figure 2: UK range map for H3130 - Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

The range map has been produced by applying a bespoke range mapping tool for Article 17 reporting (produced by JNCC) to the 10km grid square distribution map presented in Figure 1. The alpha value for this habitat was 25km. For further details see the 2019 Article 17 UK Approach document.