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

Supporting documentation for the
conservation status assessment for the habitat:

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

SCOTLAND

IMPORTANT NOTE - PLEASE READ

- The information in this document is a country-level contribution to 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.
- The 2019 Article 17 UK Approach document provides details on how this supporting information was used to produce the UK Report.
- The UK Report on the conservation status of this habitat is provided in a separate document.
- The reporting fields and options used are aligned to those set out in the European Commission guidance.
- Explanatory notes (where provided) by the country are included at the end. These provide an audit trail of relevant supporting information.
- Some of the reporting fields have been left blank because either: (i) there was insufficient information to complete the field; (ii) completion of the field was not obligatory; and/or (iii) the field was only relevant at UK-level (sections 10 Future prospects and 11 Conclusions).
- For technical reasons, the country-level future trends for Range, Area covered by habitat and Structure and functions are only available in a separate spreadsheet that contains all the country-level supporting information.
- The country-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 (Scotland information only)**
1.2 Habitat code	**3130 - Oligotrophic to mesotrophic standing waters with vegetation of the Lit**

2. Maps

2.1 Year or period	2007-
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	Previous report SCM Database

4. Range

4.1 Surface area (in km²)		
4.2 Short-term trend Period		
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		
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) b) Operator c) Unknown No d) Method	
4.11 Change and reason for change in surface area of range	No change The change is mainly due to:	
4.12 Additional information	The range is based upon the estimate used in the previous round. Newly collated vegetation map information (HabMoS) has identified some new potential occurrences of this habitat which did not appear in previous Article 17 reporting distribution maps. However, these have not been ground truthed. Therefore the maps and range submitted for the previous reporting period will be used again.	

5. Area covered by habitat

5.1 Year or period	2007-007-		
5.2 Surface area (in km²)	a) Minimum	b) Maximum	c) Best single value 201
5.3 Type of estimate	Best estimate		

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5.4 Surface area Method used	Based mainly on expert opinion with very limited data		
5.5 Short-term trend Period	2007-2017		
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 c) Unknown No d) Method		
5.14 Change and reason for change in surface area of range	No change The change is mainly due to:		
5.15 Additional information	Lochs can be subject to degradation however loss of extent is has not been repoeted from any of the sites monitored		

6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km²)	Minimum	71.64	Maximum	
	b) Area in not-good condition (km²)	Minimum	4.07	Maximum	
	c) Area where condition is not known (km²)	Minimum	0	Maximum	0
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	Based mainly on expert opinion with very limited data				
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	Two SACs have become unfavourable since 2007 Caithness and Sutherland 1ha and Loch Ussie 82ha. A total of 407ha is unfavourable out of a total estimated notified area of 7571ha. There are 76 SSSIs notified for their Oligotrophic or Mesotrophic Features 51 are classified as Favourable 2 Recovering and 23 Unfavourable.The number of Lochs SEPA monitor for the WFD has risen from 332 in 2007 to 334 in 2017. During this period number of lochs classified as High or good has remained fairly stable albeit with a rise in the number of high lochs The number of Poor or Bad lochs has declined from 79 to 38 However given the uncertainty regarding the extent and condition of this habitat generally the short term trend has been assessed as uncertain.				

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7. Main pressures and threats

7.1 Characterisation of pressures/threats

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

Threat	Ranking
Extensive grazing or undergrazing by livestock (A10)	M
Droughts and decreases in precipitation due to climate change (N02)	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
Forestry activities generating pollution to surface or ground waters (B23)	M
Sports, tourism and leisure activities (F07)	M
Hydropower (dams, weirs, run-off-the-river), including infrastructure (D02)	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		Long-term results (after 2030)

8.5 List of main conservation measures

Reduce impact of mixed source pollution (CJ01)
Adopt climate change mitigation measures (CN01)
Reduce diffuse pollution to surface or ground waters from forestry activities (CB10)
Reduce impact of hydropower operation and infrastructure (CC04)

8.6 Additional information	Eutrophication is the main issue. Measures are being taken on a broad scale both through regulation and agri-environment schemes. Additional measures are being undertaken on a limited number of sites. Measures regarding INNS would also be desirable however there is no known effective method of control of Elodea canadensis and E.nuttalii although research continues. Acidication has also been identified as a concern this is being addressed mainly through forestry regulations.

9. Future prospects

9.1 Future prospects of parameters	a) Range b) Area c) Structure and functions
9.2 Additional information	Selecting only for sites on the SCM database listed as Oligotrophic, Oligo-mesotrophic and Mesotrophic. At the last report, six sites which were oligotrophic or oligo-mesotrophic were in unfavourable condition currently there are seven Thirty-one are favourable. Thirteen Mesotrophic Sites were unfavourable at the last report and currently fifteen unfavourable and 20 favourable and 2 recovering. The number of Lochs SEPA monitor for the WFD has risen from 332 in 2007 to 334 in 2017. During this period number of lochs classified as High or good has remained fairly stable albeit with a rise in the number of high lochs The number of Poor or Bad lochs has declined from 79 to 38. Habitat quality generally seems to be improving. However, historical issues may continue to cause some declines. Any recovery is unlikely to be rapid due to processes such as internal loading. Given the uncertainty regarding the extent and condition of this habitat generally the future trend has been assessed as overall stable.

10. Conclusions

10.1. Range	
10.2. Area	
10.3. Specific structure and functions (incl. typical species)	
10.4. Future prospects	
10.5 Overall assessment of Conservation Status	
10.6 Overall trend in Conservation Status	
10.7 Change and reasons for change in conservation status and conservation status trend	a) Overall assessment of conservation status No change The change is mainly due to: b) Overall trend in conservation status No change The change is mainly due to:
10.8 Additional information	

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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 75.71
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 (-)
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	Two sites Caithness and Sutherland peatlands (Loch Auchengill upper 1ha) and Loch Ussie 82ha have changed to being considered unfavourable since 2007

12. Complementary information

12.1 Justification of % thresholds for trends	
12.2 Other relevant information	

Distribution Map

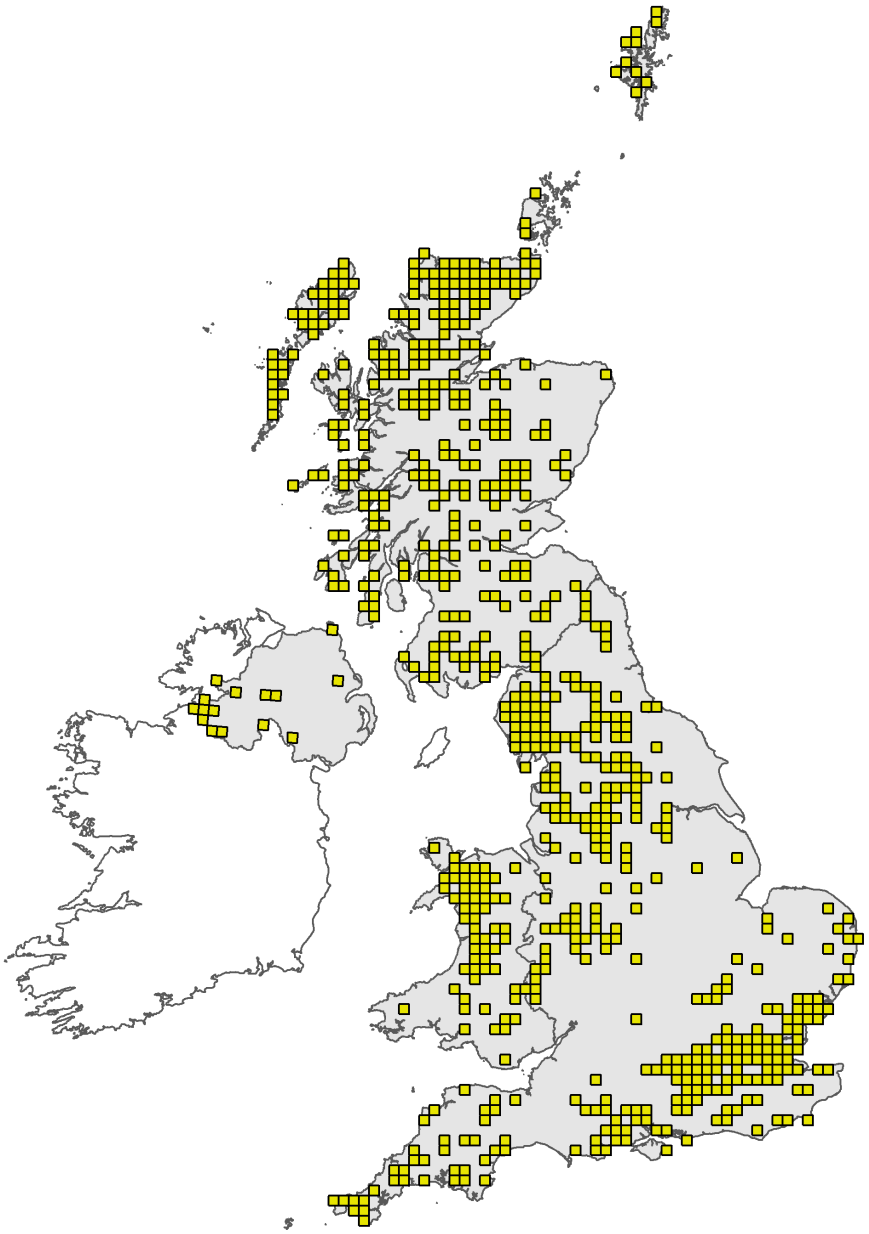

Figure 1: UK distribution map for H3130 - Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source).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

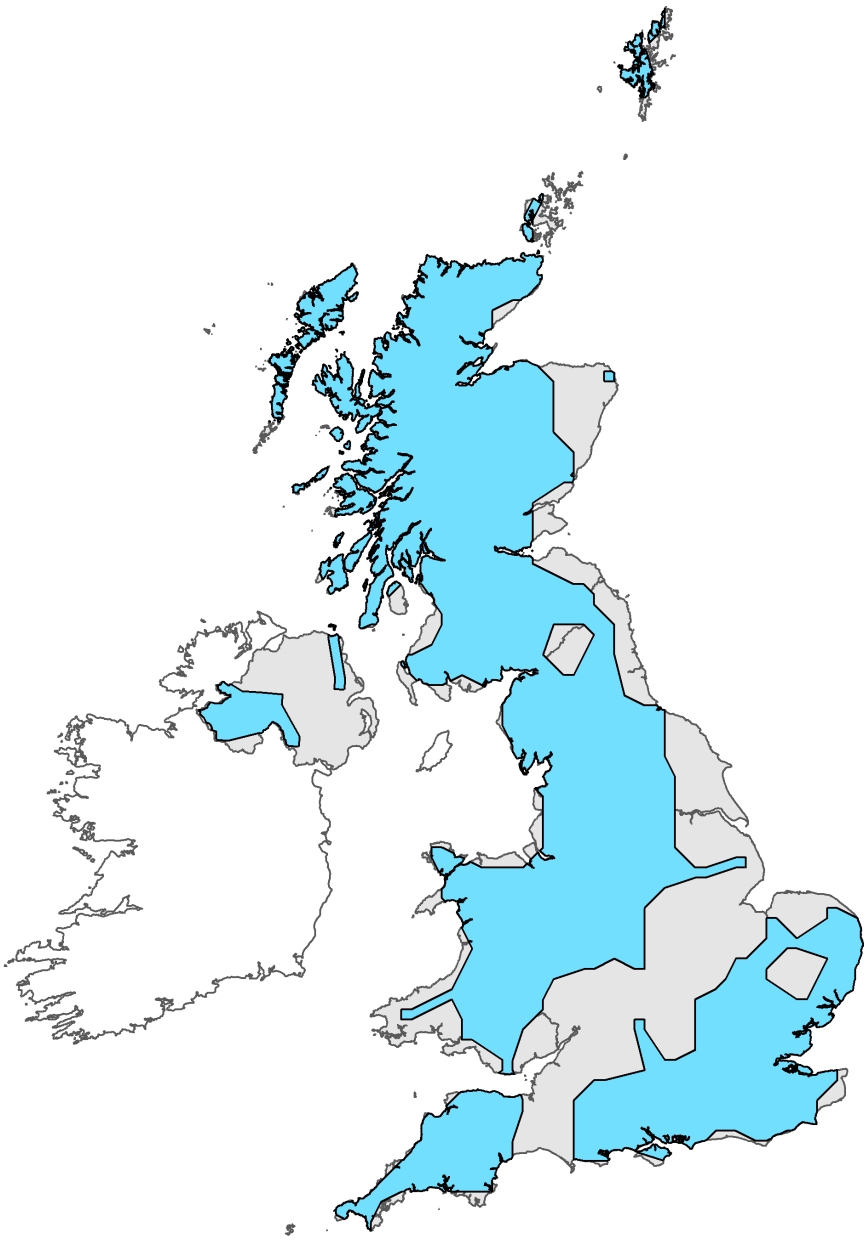

Figure 2: UK range map for H3130 - Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government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

Explanatory Notes

Habitat code: 3130 Region code: ATL

Field label	Note
5.2c Surface area (in km²) - Best single value	Changed from notified SAC loch area to figure provided by Habitat Map of Scotland which is our current best estimate