

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

Third Report by the United Kingdom under  
Article 17

on the implementation of the Directive  
from January 2007 to December 2012  
Conservation status assessment for

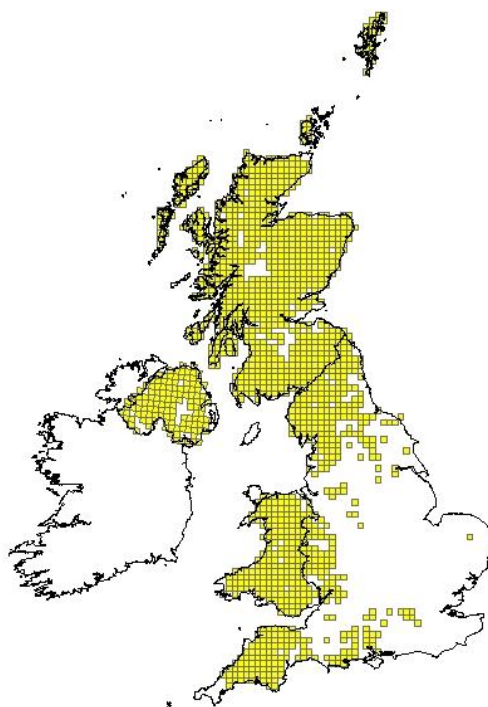
Species:

S1106 - Atlantic salmon. (*Salmo salar*)

## Reporting format on the 'main results of the surveillance under Article 11' for Annex II, IV & V species

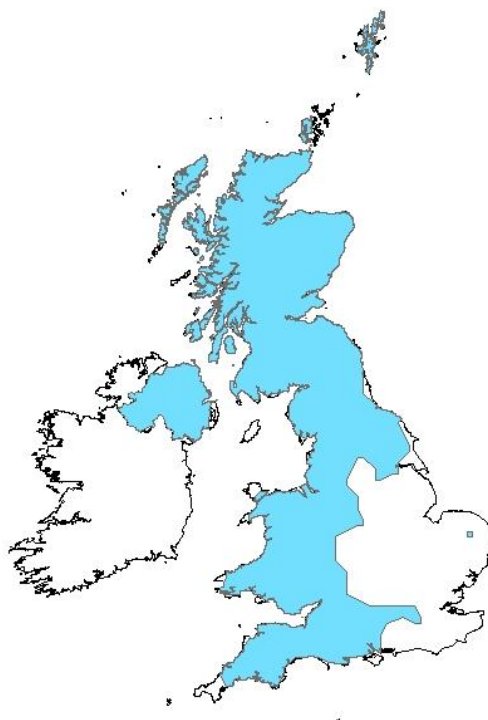
<i>Field name</i>	<i>Brief explanations</i>	
<b>0.2 Species</b>	<b>0.2.1 Species code</b>	<b>S1106</b>
	<b>0.2.2 Species scientific name</b>	<b><i>Salmo salar</i></b>
	<b>0.2.3 Alternative species scientific name</b> Optional	
	<b>0.2.4 Common name</b> Optional	

<b>1.1 Maps</b>			
<b>1.1.1 Distribution map</b>	<b>True</b>	<b>Sensitive</b>	<b>False</b>
	The distribution map is based on species records which are considered to be representative of the range within the current reporting period. For further details see the 2013 Article 17 UK Approach document.		



<b>1.1.2 Method used - map</b>	<b>Estimate based on partial data with some extrapolation and/or modelling</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
<b>1.1.3 Year or period</b>	<b>1985-2011</b>
	The distribution map is based on species records which are considered to be representative of the range within the current reporting period. For further details see the 2013 Article 17 UK Approach document.

<b>1.1.4 Additional distribution map</b> Optional	<b>False</b>
<b>1.1.5 Range map</b>	<b>True</b> The range map was produced by applying the UK range mapping tool to the distribution map presented in 1.1.4. The alpha value for this species was 25km. For further details see the 2013 Article 17 UK Approach document.



<b>2.1 Biogeographical region &amp; marine regions</b>	<b>ATL</b>
<b>2.2 Published sources</b>	<p><b>Anon (2012) Digest of Statistics for Salmon and Inland Fisheries in the DCAL Jurisdiction 2012: Department of Culture Arts &amp; Leisure; NI Statistics &amp; Research Agency.</b></p> <p><b>Arrigo KR, van Dijken G, Pabi S. (2008) Impact of a shrinking Arctic ice cover on marine primary production. Geophysical Research Letters 35. doi:10.1029/2008GL035028. Available online at <a href="http://www.agu.org/pubs/crossref/2008/2008GL035028.shtml">http://www.agu.org/pubs/crossref/2008/2008GL035028.shtml</a></b></p> <p><b>Beck M., Evans R., Feist S.W., Stebbing P., Longshaw M. and Harris E. 2008. Anisakis simplex sensu lato associated with red vent syndrome in wild Atlantic salmon <i>Salmo salar</i> in England and Wales. Diseases of Aquatic Organisms 82: 61-65.</b></p> <p><b>CEFAS and Environment Agency (2012) Annual Assessment of Salmon Stocks and Fisheries in England and Wales 2011. Environment Agency, Bristol. Available online at <a href="http://www.environment-agency.gov.uk/static/documents/Research/Annual_Assessment_of_EW_salmon_stocks_2011.pdf">http://www.environment-agency.gov.uk/static/documents/Research/Annual_Assessment_of_EW_salmon_stocks_2011.pdf</a></b></p> <p><b>Chris Mainstone &amp; Alastair Burn (2011) Relationships between</b></p>

	<p>ecological objectives and associated decision-making under the Habitats and Water Framework Directives. Discussion paper, Natural England.</p> <p>Davidson, I. C., and M. S. Hazlewood. 2008. Effect of climate change on salmon fisheries. Environment Agency Science Report No. W2-047/SR.</p> <p>Davidson, I. C., M. S. Hazlewood, and R. J. Cove. 2006. Predicted growth of juvenile trout and salmon in four rivers in England and Wales based on past and possible future temperature regimes linked to climate change. In: G. Harris and N. Milner, editors. Sea Trout: Biology, Conservation and Management. Proceedings of the First International Sea Trout Symposium, Cardiff, July 2004. Blackwell Publishing, Oxford.</p> <p>ESTHER CLEWS, ISABELLE DURANCE, I. P. VAUGHAN and S. J. ORMEROD (2010) Juvenile salmonid populations in a temperate river system track synoptic trends in climate. <i>Global Change Biology</i> (2010), Published on-line doi: 10.1111/j.1365-2486.2010.02211.x</p> <p>Elliott, J. M., and J. A. Elliott. 2010. Temperature requirements of Atlantic salmon, brown trout and Arctic charr. <i>Journal of Fish Biology</i> 77:1793-1817.</p> <p>Ensing D, Crozier WW, Kennedy R &amp; Boylan P (2012) Summary of Salmon Fisheries and Status of Stocks in Northern Ireland for 2011. ICES Working Group on North Atlantic Salmon, Copenhagen, 2012 Working Paper.</p> <p>Environment Agency (2012) Summary of outcomes of the Review of Consents on water-related SACs. Excel spreadsheet.</p> <p>Environment Agency/CEFAS (2012) Annual assessment of salmon stocks and fisheries in England and Wales 2011. Preliminary assessment prepared for ICES, March 2012. Available at: <a href="http://www.environment-agency.gov.uk/static/documents/Research/Annual_Assessment_of_EW_salmon_stocks_2011.pdf">http://www.environment-agency.gov.uk/static/documents/Research/Annual_Assessment_of_EW_salmon_stocks_2011.pdf</a></p> <p>Friedland KD, Chaput G &amp; MacLean JC. (2005). The emerging role of climate in post-smolt growth of Atlantic salmon. <i>ICES Journal of Marine Science</i>, 62: 1338-1349.</p> <p>Friedland, K.D., Reddin D.G., McMenemy, J.R., &amp; Drinkwater, K.F. (2003). Multidecadal trends in North American Atlantic salmon (<i>Salmo salar</i>) stocks and climate trends relevant to juvenile survival. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> 60: 568-583.</p> <p>GARDINER, R. &amp; EGGLESHAW, H. 1986. A Map of the Distribution in Scottish Rivers of the Atlantic Salmon, <i>Salmo salar</i> L. Department of Agriculture and Fisheries for Scotland, Freshwater Fisheries Laboratory, Pitlochry. 5pp + folded map. Scottish Fisheries Publication.</p> <p>Hansen, L. P., M. Holm, J. C. Holst, and J. A. Jacobsen. 2007. The Ecology of Post-Smolts of Atlantic Salmon. Pages 25-39 in D. Mills, editor. <i>Salmon at the Edge</i>. Blackwell Science, Oxford.</p> <p>Henderson, P. A., R. M. Seaby, and R. Somes. 2007. A review of the status of salmon and bullhead in eight Welsh SAC rivers. CCW Environmental Monitoring Report No. 35.</p> <p>Hendry, K., D. Cragg-Hine. (2003). Ecology of the Atlantic Salmon. Life in UK Rivers Ecology Series No. 7. English Nature, Peterborough.</p> <p>ICES (2012) Report of the Working Group on North Atlantic</p>
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**NASCO (2009) Focus Area Report on Protection, Restoration and Enhancement of Salmon Habitat**  
[http://www.nasco.int/pdf/far\\_habitat/HabitatFAR\\_NIreland.pdf](http://www.nasco.int/pdf/far_habitat/HabitatFAR_NIreland.pdf)

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**UK distribution map data sources**

	<p><b>BIS CCW HQ Bullhead Monitoring, Wye &amp; Usk Catchments - CCW- Report no. 818 Emailed to JNCC (no details) Summer 2012</b></p> <p><b>BIS CCW Montgomeryshire General Data Files Emailed to JNCC (no details) Summer 2012</b></p> <p><b>BIS CCW Radnor and North Brecknock-SSSI Scientific Data Emailed to JNCC (no details) Summer 2012</b></p> <p><b>BIS CCW Radnorshire Woodland Files Emailed to JNCC (no details) Summer 2012</b></p> <p><b>BIS CCW River Ithon Species Data Emailed to JNCC (no details) Summer 2012</b></p> <p><b>BIS CCW River Usk Species Data Emailed to JNCC (no details) Summer 2012</b></p> <p><b>BIS CCW River Wye Species Data Emailed to JNCC (no details) Summer 2012</b></p> <p><b>BIS sent directly to JNCC (no details) SurveyName BBNP Species Database</b></p> <p><b>BIS sent directly to JNCC (no details) SurveyName BIS casual records 2008 - unconfirmed</b></p> <p><b>BIS sent directly to JNCC (no details) SurveyName Brecknock Wildlife Trust Reserves data (Block 4)</b></p> <p><b>BIS sent directly to JNCC (no details) SurveyName Misc records in BBNP (SEWBReC)2 - South East Wales Biological Record Centre</b></p> <p><b>BIS sent directly to JNCC (no details) SurveyName Miscellaneous records in BIS area</b></p> <p><b>BIS sent directly to JNCC (no details) SurveyName Shad Monitoring - CCW - HQ MFSG - Report no.40</b></p> <p><b>Database for the Atlas of Freshwater Fishes (1637-2003) From MARLAB.AC.UK (Ross Gardiner) emailed to JNCC (LH) 19/09/2012. Salmon Rivers in Scotland digital dataset assembled by Scottish Govt Marine Scotland Science 2008 (produced from map Gardiner and Egglshaw, 1986. JNCC Report 312 (Dataset, CEDAR)</b></p> <p><b>Marine Nature Conservation Review (MNCR) and associated benthic marine data (1954-2000)</b></p> <p><b>NBN Gateway data: Biological Records Centre GA000174 Database for the Atlas of Freshwater Fishes</b></p> <p><b>NBN Gateway data: Bristol Regional Environmental Records Centre GA001100 BRERC JNCC May 2012</b></p> <p><b>NBN Gateway data: Environment Agency GA001129 Environment Agency Rare and Protected Species records v1</b></p> <p><b>NBN Gateway data: extracted by LH 11/09/2012 Centre for Environmental Data and Recording GA000926 Northern Ireland Priority Species Data Set</b></p> <p><b>NBN Gateway data: extracted by LH 11/09/2012 National Trust GA001105 Extract of National Trust species database covering Article 17 species</b></p> <p><b>NBN Gateway data: Lancashire Environment Record Network GA001064 LERN Freshwater Fish Records</b></p> <p><b>NBN Gateway data: Norfolk Biodiversity Information Service GA000908 Norfolk Environment Agency Priority Species Records</b></p> <p><b>Pembrokeshire Marine Species Atlas 1899-1998</b></p>
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	<p>UK Distribution Map data sources</p> <p>BIS CCW HQ Bullhead Monitoring, Wye &amp; Usk Catchments - CCW- Report no. 818 Emailed to JNCC (no details) Summer 2012</p> <p>BIS CCW Montgomeryshire General Data Files Emailed to JNCC (no details) Summer 2012</p> <p>BIS CCW Radnor and North Brecknock-SSSI Scientific Data Emailed to JNCC (no details) Summer 2012</p> <p>BIS CCW Radnorshire Woodland Files Emailed to JNCC (no details) Summer 2012</p> <p>BIS CCW River Ithon Species Data Emailed to JNCC (no details) Summer 2012</p> <p>BIS CCW River Usk Species Data Emailed to JNCC (no details) Summer 2012</p> <p>BIS CCW River Wye Species Data Emailed to JNCC (no details) Summer 2012</p> <p>BIS sent directly to JNCC (no details) SurveyName BBNP Species Database</p> <p>BIS sent directly to JNCC (no details) SurveyName BIS casual records 2008 - unconfirmed</p> <p>BIS sent directly to JNCC (no details) SurveyName Brecknock Wildlife Trust Reserves data (Block 4)</p> <p>BIS sent directly to JNCC (no details) SurveyName Misc records in BBNP (SEWBRc)2 - South East Wales Biological Record Centre</p> <p>BIS sent directly to JNCC (no details) SurveyName Miscellaneous records in BIS area</p> <p>BIS sent directly to JNCC (no details) SurveyName Shad Monitoring - CCW - HQ MFSG - Report no.40</p> <p>Database for the Atlas of Freshwater Fishes (1637-2003) From MARLAB.AC.UK (Ross Gardiner) emailed to JNCC (LH) 19/09/2012. Salmon Rivers in Scotland digital dataset assembled by Scottish Govt Marine Scotland Science 2008 (produced from map Gardiner and Eglishaw, 1986.</p> <p>JNCC Report 312 (Dataset, CEDAR)</p> <p>Marine Nature Conservation Review (MNCR) and associated benthic marine data (1954-2000)</p> <p>NBN Gateway data: Biological Records Centre GA000174 Database for the Atlas of Freshwater Fishes</p> <p>NBN Gateway data: Bristol Regional Environmental Records Centre GA001100 BRERC JNCC May 2012</p> <p>NBN Gateway data: Environment Agency GA001129 Environment Agency Rare and Protected Species records v1</p> <p>NBN Gateway data: extracted by LH 11/09/2012 Centre for Environmental Data and Recording GA000926 Northern Ireland Priority Species Data Set</p> <p>NBN Gateway data: extracted by LH 11/09/2012 National Trust GA001105 Extract of National Trust species database covering Article 17 species</p> <p>NBN Gateway data: Lancashire Environment Record Network GA001064 LERN Freshwater Fish Records</p> <p>NBN Gateway data: Norfolk Biodiversity Information Service GA000908 Norfolk Environment Agency Priority Species Records</p> <p>Pembrokeshire Marine Species Atlas 1899-1998</p>
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<b>2.3 Range</b>		
<b>2.3.1 Surface area Range</b>	<b>180057.75</b>	
	The surface area of the range was calculated from the map presented in 1.1.5. For further details see the 2013 Article 17 UK Approach document.	
<b>2.3.2 Method used Surface area of Range</b>	<b>Estimate based on partial data with some extrapolation and/or modelling</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.3.3 Short-term trend Period</b>	<b>2001-2012</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.3.4 Short term trend Trend direction</b>	<b>increase</b>	
	The short term trend direction was derived by comparing the range map in 1.1.5 with the range map produced in the 2007 report, by considering the range trend in the 2007 report, and by considering any further information provided by the UK country conservation agencies. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.3.5 Short-term trend Magnitude</b> Optional	<b>a) Minimum</b>	
	<b>b) Maximum</b>	
<b>2.3.6 Long-term trend Period</b> Optional	<b>1989-2012</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.3.7 Long-term trend Trend direction</b> Optional	<b>increase</b>	
	The long term trend direction was derived by comparing the range map in 1.1.5 with the range map produced in the 2007 report, by considering the range trend in the 2007 report, and by considering any further information provided by the UK country conservation agencies. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.3.8 Long-term trend Magnitude</b> Optional	<b>a) Minimum</b>	
	<b>b) Maximum</b>	
<b>2.3.9 Favourable reference</b>	<b>a) Value in km<sup>2</sup></b>	<b>163132</b>

<b>range</b>	The FRV reported in 2007 has been updated by running the data used for reporting in 2007 through the revised UK range mapping tool. For further details see the 2013 Article 17 UK Approach document.	
	<b>b) Operator for FRR</b>	
	<b>c) FRR is unknown (indicated by "true")</b>	<b>False</b>
	<b>d) Method used to set FRR</b>	<b>The FRV reported in 2007 has been updated by running the data used for reporting in 2007 through the revised UK range mapping tool. The value is considered to be large enough to support a viable population and no lower than the range estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document.</b>
	The FRV reported in 2007 has been updated by running the data used for reporting in 2007 through the revised UK range mapping tool. The value is considered to be large enough to support a viable population and no lower than the range estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document.	
<b>2.3.10 Reason for change</b> Is the difference between the reported value in 2.3.1 and the previous reporting round mainly due to...	<b>a) Genuine change?</b>	<b>True</b>
	The increase in surface area of range is believed to be genuine.	
	<b>b) Improved knowledge/more accurate data?</b>	<b>False</b>
	The increase in surface area of range is believed to be genuine.	
	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>
Use of a revised UK range mapping tool had little effect on the calculation for surface area of range.		

<b>2.4 Population</b>		
<b>2.4.1 Population size estimation</b> (using individuals or agreed exceptions where possible)	<b>a) Unit</b>	
	<b>b) Minimum</b>	
	<b>c) Maximum</b>	

<b>2.4.2 Population size estimation</b> (using population unit other than individuals) Optional ( <i>if 2.4.1 filled in</i> )	<b>a) Unit</b>	<b>number of adults</b>
	The population unit - number of spawning adults - is the same as reported in 2007.	
	<b>b) Minimum</b>	<b>604568</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	<b>c) Maximum</b>	<b>646161</b>
For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.		
<b>2.4.3 Additional information on population estimates / conversion</b> Optional	<b>a) Definition of "locality"</b>	
	<b>b) Method to convert data</b>	
	<b>c) Problems encountered to provide population size estimation</b>	
<b>2.4.4 Year or period</b>	<b>2001-2011</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.5 Method used Population size</b>	<b>Estimate based on partial data with some extrapolation and/or modelling</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.6 Short-term trend Period</b>	<b>2001-2011</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.7 Short-term trend Trend direction</b>	<b>stable</b>	
	The overall UK trend has been assessed as stable. In Scotland the annual rod catch has been increasing, although it should be noted that several life history components make up the total Scottish stock, and the spring stock is in a long term decline. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.8 Short-term trend Magnitude</b> Optional	<b>a) Minimum</b>	
	<b>b) Maximum</b>	

	<b>c) Confidence interval</b>	
<b>2.4.9 Short-term trend Method used</b>	<b>Estimate based on partial data with some extrapolation and/or modelling</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.10 Long-term trend – Period</b>	<b>1989-2011</b>	
Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.11 Long-term trend Trend direction</b>	<b>stable</b>	
Optional	The overall UK trend has been assessed as stable. In Scotland the annual rod catch has been increasing, although it should be noted that several life history components make up the total Scottish stock, and the spring stock is in a long term decline. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.12 Long-term trend Magnitude</b>	<b>a) Minimum</b>	
Optional		
	<b>b) Maximum</b>	
	<b>c) Confidence interval</b>	
<b>2.4.13 Long term trend Method used</b>	<b>Estimate based on partial data with some extrapolation and/or modelling</b>	
Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.14 Favourable reference population</b>	<b>a) Number of individuals/agreed exceptions/other units</b>	<b>741000</b>
	The FRV for population is the same as reported in 2007. For further details please see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	<b>b) Operator</b>	
	<b>c) FRP is unknown (indicated by "true")</b>	<b>False</b>

	<b>d) Method used to set FRP</b>	<b>The FRV for population is the same as reported in 2007. The value is considered to be large enough for the population to be viable and no lower than the population estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document and relevant country-level reporting information.</b>
	The FRV for population is the same as reported in 2007. The value is considered to be large enough for the population to be viable and no lower than the population estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.15 Reason for change</b> Is the difference between the value reported at 2.4.1 or 2.4.2 and the previous reporting round mainly due to:	<b>a) Genuine change?</b>	<b>False</b>
	The increase in population estimate is not thought to be genuine but is thought to be due to better data.	
	<b>b) Improved knowledge/more accurate data?</b>	<b>True</b>
	The increase in population estimate is not thought to be genuine but is thought to be due to better data.	
	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>
		The increase in population estimate is not thought to be genuine but is thought to be due to better data.

<b>2.5 Habitat for the species</b>	
<b>2.5.1 Area estimation</b>	<b>1098.53</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.  There is thought to be a sufficient amount of habitat in the UK to support a viable population of the species.
<b>2.5.2 Year or period</b>	<b>2007-2012</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
<b>2.5.3 Method used Habitat for the species</b>	<b>Estimate based on partial data with some extrapolation and/or modelling</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
<b>2.5.4 Quality of the habitat</b>	<b>a) Habitat quality</b> <b>Good</b>
	For further details see the 2013 Article 17 UK Approach document and

	relevant country-level reporting information.	
	<b>b) Assessment method</b>	<b>Condition assessment of SAC rivers, ecological status assessment of the wider river network under the Water Framework Directive, and use of the Life Cycle Unit System (Kennedy, 1984).</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.5 Short-term trend Period</b>	<b>2001-2012</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.6 Short-term trend Trend direction</b>	<b>increase</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.7 Long-term trend Period</b>	<b>1989-2012</b>	
Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.8 Long-term trend Trend direction</b>	<b>increase</b>	
Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.9 Area of suitable habitat for the species</b>	<b>a) Value in km<sup>2</sup></b>	
	<b>b) Absence of data indicated as '0'</b>	
<b>2.5.10 Reason for change</b> Is the difference between the value reported at 2.5.1 and the previous reporting round mainly due to	<b>a) Genuine change?</b>	<b>False</b>
	Surface area of habitat was reported as unknown in 2007 so no comparison is possible.	
	<b>b) Improved knowledge/more accurate data?</b>	<b>False</b>
	Surface area of habitat was reported as unknown in 2007 so no comparison is possible.	
	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>
		Surface area of habitat was reported as unknown in 2007 so no comparison is possible.

**2.6 Main pressures**

<b>a) Pressure</b>	<b>b) Ranking</b>	<b>c) Pollution qualifier</b>
	H = high importance	

	(max 5 entries) M = medium importance L = low importance	
F01: Marine and Freshwater Aquaculture	H	P
H01: Pollution to surface waters (limnic & terrestrial, marine & brackish)	H	NPX
J02: human induced changes in hydraulic conditions	H	
M01: Changes in abiotic conditions	H	
M02: Changes in biotic conditions	H	
C01: Mining and quarrying	M	N
F02: Fishing and harvesting aquatic resources	M	N
J03: Other ecosystem modifications	M	
K03: Interspecific faunal relations	M	
A02: modification of cultivation practices	L	
A04: grazing	L	NPX
A06: annual and perennial non-timber crops	L	NX
A08: Fertilisation	L	NP
C03: Renewable abiotic energy use	L	
D01: Roads, paths and railroads	L	P
E01: Urbanised areas, human habitation	L	NP
H06: excess energy	L	
I01: invasive non-native species	L	
XE: Threats and pressures from outside the EU territory	L	

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

**2.6.1 Method used – Pressures**

**mainly based on expert judgement and other data**

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

<b>2.7 Threats</b>		
<b>a) Threat</b>	<b>b) Ranking</b>	<b>c) Pollution qualifier</b>
	H = high importance (max 5 entries) M = medium importance L = low importance	
F02: Fishing and harvesting aquatic resources	H	



H01: Pollution to surface waters (limnic & terrestrial, marine & brackish)	H	NPX
J02: human induced changes in hydraulic conditions	H	
M01: Changes in abiotic conditions	H	
C01: Mining and quarrying	M	
C03: Renewable abiotic energy use	M	
F01: Marine and Freshwater Aquaculture	M	
I03: introduced genetic material, GMO	M	
K03: Interspecific faunal relations	M	
M02: Changes in biotic conditions	M	
A02: modification of cultivation practices	L	
A04: grazing	L	NP
A06: annual and perennial non-timber crops	L	X
A08: Fertilisation	L	NP
B02: Forest and Plantation management & use	L	NP
D01: Roads, paths and railroads	L	
E01: Urbanised areas, human habitation	L	NP
H06: excess energy	L	
I01: invasive non-native species	L	
XE: Threats and pressures from outside the EU territory	L	

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

<b>2.7.1 Method used – Threats</b>	<b>expert opinion</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

<b>2.8 Complementary information</b>	
<b>2.8.1 Justification of % thresholds for trends</b>	
<b>2.8.2 Other relevant information</b>	<b>This assessment is focussing on the freshwater habitat for this species, but its marine habitat is also a very important factor affecting its status. Marine habitat has declined in extent and quality as a result of large-scale regional changes in climate of the Arctic area. In the sea, Atlantic salmon feed pelagically on small fish and crustaceans in very specific thermal habitat off Greenland and the Faroes (Hansen et al. 2007). Climate change has caused the extent of this habitat to reduce substantially in recent years (Davidson et al. 2007, JNCC 2007). Furthermore, climate change is thought to have caused the timing of the seaward migration to be poorly synchronised with conditions in the marine environment (Friedland et al., 2003). The magnitude of these changes greatly exceeds the total of any measures that can be taken in freshwaters to conserve salmon populations and further large-scale habitat changes in Arctic areas seem likely as sea ice cover reduces (Arrigo et al. 2008). Nevertheless, the reductions in fishing effort and a continued programme of habitat management for salmon have been successful in maintaining salmon populations at a broadly stable level, at least for the moment.</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
<b>2.8.3 Trans-boundary assessment</b>	

<b>2.9 Conclusions (<i>assessment of conservation status at end of reporting period</i>)</b>		
<b>2.9.1 Range</b>	<b>a) Conclusion</b>	<b>Favourable</b>
	Range has been assessed as Favourable because surface area of range is greater than the FRV and the short term trend is increase.	
	<b>b) Qualifier</b>	
<b>2.9.2 Population</b>	<b>a) Conclusion</b>	<b>Inadequate</b>
	Population has been assessed as Inadequate because, although the population trend is believed to be stable, the population is slightly below the FRV. Populations in some principal salmon rivers are declining.	
	<b>b) Qualifier</b>	<b>stable</b>
	The short term population trend is stable though it should be noted that this is a long lived species.	

<b>2.9.3 Habitat for the species</b>	<b>a) Conclusion</b>	<b>Favourable</b>
	Habitat for species has been assessed as Favourable because there is thought to be sufficient habitat to support a viable population, the habitat quality is moderate and the short term trend increasing. However, it should be noted that there are strong differences between catchments and further that in the marine habitat, which has not been included in this assessment, there are issues with habitat quality linked to changes driven by climate change.	
	<b>b) Qualifier</b>	
<b>2.9.4 Future prospects</b>	<b>a) Conclusion</b>	<b>Inadequate</b>
	Future prospects is assessed as Inadequate on the basis of assessments of the future prospects of the three parameters, range, population and habitat for species:  Range future prospects: Good Population future prospects: Poor Habitat future prospects: Good Overall future prospects: Inadequate.	
	<b>b) Qualifier</b>	<b>declining</b>
	Various threats including climate change and hydropower generation suggest the population may decrease in the future.	
<b>2.9.5 Overall assessment of Conservation Status</b>	<b>Inadequate</b>	
	The overall assessment is Inadequate because population and future prospects have been assessed as Inadequate.	
<b>2.9.6 Overall trend in Conservation Status</b>	<b>stable</b>	
	On balance, the overall trend is stable.	

### 3 Natura 2000 coverage & conservation measures - Annex II species (only applies to species listed under Annex II of the Directive)

<b>3.1 Population</b>		
<b>3.1.1 Population size</b>  Estimation of population size included in the SAC network	<b>a) Unit</b>	
	<b>b) Minimum</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	<b>c) Maximum</b>	

	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
<b>3.1.2 Method used</b>	<b>Absent data</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
<b>3.1.3 Trend of population size within the network</b> (short-term trend)	<b>stable</b>
Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

<b>3.2 Conservation measures</b>															
Conservation measures taken (i.e. already being implemented) within the reporting period and provided information about their importance, location and evaluation.															
3.2.1 Measure	3.2.2 Type					3.2.3 Ranking  H = high importance M = medium importance L = low importance	3.2.4 Location  where the measure is PRIMARILY applied			3.2.5 Broad evaluation of the measure					
	a) Legal/statutory	b) Administrative	c) Contractual	d) Recurrent	e) One-off		a) Inside	b) Outside	c) Both inside & outside	a) Maintain	b) Enhance	c) Long term	d) No effect	e) Unknown	f) Not evaluated
1.2: Measures needed, but not implemented		Y		Y	Y	L			Y		Y	Y			
2.0: Other agriculture-related measures		Y	Y	Y		L			Y		Y				
2.2: Adapting crop production		Y	Y	Y		L			Y		Y	Y			
4.0: Other wetland-related measures	Y	Y	Y	Y	Y	M			Y		Y	Y			
4.1: Restoring/improving water quality	Y	Y		Y	Y	M			Y		Y	Y			

4.2: Restoring/improving the hydrological regime	Y	Y	Y	Y	Y	M			Y		Y	Y			
4.3: Managing water abstraction	Y			Y	Y	M			Y		Y	Y			
5.0: Other marine-related measures	Y					M			Y		Y				
6.1: Establish protected areas/sites	Y					M			Y		Y				
7.1: Regulation/Management of hunting and taking	Y				Y	L			Y		Y				
7.2: Regulation/Management of fishery in limnic systems	Y	Y		Y	Y	M			Y		Y	Y			
7.3: Regulation/Management of fishery in marine and brackish systems	Y		Y	Y	Y	L		Y			Y	Y			
7.4: Specific single species or species group management measures					Y	L			Y			Y			
8.1: Urban and industrial waste management	Y	Y		Y		L			Y		Y				
8.2: Specific management of traffic and energy transport systems	Y				Y	L			Y		Y	Y			

9.2: Regulating/ Managing exploitation of natural resources on sea	Y					M			Y		Y				
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For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.