The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015

CONTENTS

The Secretary of State, in exercise of the powers conferred by section 40(2) of the Environment Act 1995(**a**), and having consulted the Welsh Ministers to the extent that there is any effect in those parts of Wales that are within the catchment areas of the rivers Dee, Wye and Severn, and having also consulted the Environment Agency, gives the following Directions to the Environment Agency.

(**a**) 1995 c.25; section 40(2) was amended by S.I. 2011/1043.

The Welsh Ministers, in exercise of the powers conferred by article 11 of the Natural Resources Body for Wales (Establishment) Order 2012(**a**), and having consulted the Secretary of State to the extent that there is any effect in those parts of England that are within the catchment areas of the rivers Dee, Wye and Severn, and having also consulted the Natural Resources Body for Wales, give the following Directions to the Natural Resources Body for Wales.

The Directions are given for the implementation of:

(a) Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy(**b**);

(b) Directive 2008/105/EC of the European Parliament and of the Council on environmental quality standards in the field of water policy(**c**);

(c) Directive 2013/39/EU of the European Parliament and of the Council amending Directives 2000/60/EC and 2008/105/EC as regards priority substances in the field of water policy(**d**).

Citation, commencement and application

1.—(1) These Directions may be cited as the Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015.

(2) The following provisions come into force on 14th September 2015—

(a) this article and article 2;

(b) article 12(a) and (b);

(c) paragraphs 9 to 11 and 18 to 20 of Part 3 of Schedule 3; and

(d) Table 1 in Part 3 of Schedule 3.

(3) The remainder of these Directions come into force on 22nd December 2015.

(4) These Directions apply in relation to bodies of surface water and groundwater in England and Wales.

Interpretation

2.—(1) In these Directions—

"the EQS Directive" means Directive 2008/105/EC of the European Parliament and of the Council on environmental quality standards in the field of water policy;

"the Groundwater Directive" means Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration(**e**);

"the QAQC Directive" means Directive 2009/90/EC on technical specifications for chemical analysis and monitoring of water status(**f**);

"the Water Framework Directive" means Directive 2000/60/EC of the European Parliament and of the Council of 23rd October 2000 establishing a framework for Community action in the field of water policy;

"the WFD Regulations" means the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003(**g**);

(**a**) S.I. 2012/1903, amended by S.I. 2013/755(W.90).
(**b**) OJ No L 327, 22.12.2000, p 1, as last amended by Directive 2014/101/EU (OJ No L 311, 31.10.2014, p 32).
(**c**) OJ No L 348, 24.12.2008, p.84, as last amended by Directive 2013/39/EU (OJ No L 226, 24.8.2013, p1).
(**d**) OJ No L 226, 24.8.2013, p 1.
(**e**) OJ No L 372, 27.12.2006, p 19, as last amended by Directive 2014/80/EU (OJ No L 182, 31.6.2014, p 52).
(**f**) OJ No L 201, 1.8.2009, p 36.
(**g**) S.I. 2003/3242, as amended by S.I. 2005/2035, 2007/3538, 2008/1097, 2010/675, 2011/556, 603, 1043, 2013/755 (W.90) and 1675.

“5 percentile standard” means a standard that is failed if the measured value of the parameter to which the standard refers is less than the standard for more than 5% of the time;

“10 percentile standard” means a standard that is failed if the measured value of the parameter to which the standard refers (for example the concentration of a pollutant) is less than the standard for more than 10% of the time;

“90 percentile standard” means a standard that is failed if the measured value of the parameter to which the standard refers (for example the concentration of a pollutant) is greater than the standard for 10% or more of the time;

“95 percentile standard” means a standard that is failed if the measured value of the parameter to which the standard refers (for example the concentration of a pollutant) is greater than the standard for 5% or more of the time;

“98 percentile standard” means a standard that is failed if the measured value of the parameter to which the standard refers (for example the concentration of a pollutant) is greater than the standard for 2% or more of the time;

“99 percentile standard” means a standard that is failed if the measured value of the parameter to which the standard refers (for example the concentration of a pollutant) is greater than the standard for 1% or more of the time;

“ambient river temperature” means the temperature, in degrees centigrade, of a river or part of a river in the absence of any heat pollution or artificial release of water affecting the temperature of that river or part;

“annual mean” may relate to a period of 1 year, or a multiple of such period;

“the Appropriate Agency” means the Environment Agency in relation to England and the Natural Resources Body for Wales in relation to Wales;

“biota taxon” means a particular aquatic taxon within the taxonomic rank “sub-phylum”, “class” or their equivalent;

“compliance assessment period” means the period over which measured values are obtained for the purposes of calculating an arithmetic average or a percentile value; this may be part of a year; a year; part of several years; or several years;

“cyprinid”, in relation to a water body means that, in the Appropriate Agency’s judgement, the water body would, in the absence of more than slight disturbances resulting from human activity, support a sustainable fish population dominated by cyprinid, but not salmonid species;

“good”, when referring to the ecological status of a water body, means the boundary between the conditions consistent with the description of good ecological status and moderate ecological status in accordance with section 1.2 of Annex V to the Water Framework Directive; values on the boundary are consistent with the description of good status;

“good”, when referring to priority substance environmental standards, means the boundary between conditions consistent with the description of good surface water chemical status and failing to achieve good surface water chemical status in Article 2 of, and Annex V to, the Water Framework Directive;

“high”, when referring to the ecological status of a water body, means the boundary between the conditions consistent with the description of high ecological status and good ecological status in accordance with section 1.2 of Annex V to, the Water Framework Directive; values on the boundary are consistent with the description of high status;

“matrix” means a compartment of the aquatic environment, namely water, sediment or biota;

“moderate”, when referring to the ecological status of a water body, means the boundary between the conditions consistent with the description of moderate ecological status and poor ecological status, in accordance with section 1.2 of Annex V to the Water Framework Directive; values on the boundary are consistent with the description of moderate status;

“percentile standard” means a standard for which the relevant value must be achieved for the specified percentage of the compliance assessment period;

"poor" when referring to the ecological status of a water body, means the boundary between the conditions consistent with the description of poor ecological status and bad ecological status in accordance with section 1.2 of Annex V to the Water Framework Directive; values on the boundary are consistent with the description of poor status;

"programme of measures" means a programme of measures required by Article 11 of the Water Framework Directive;

"salinity" means the ratio of the electrical conductivity of a sample of water (at 15°C, and one standard atmospheric pressure) to that of a standard solution of Potassium Chloride (KCl); a ratio of 1 is equivalent to a salinity of 35;

"salmonid" in relation to a water body, means that, in the Appropriate Agency's judgement, the water body would, in the absence of more than slight disturbances resulting from human activity, support a sustainable fish population dominated by salmonid species;

"specified lakes" means the lakes listed in the table in Schedule 6;

"year" means any 12 month period.

(2) Any expression used in these Directions and the Water Framework Directive, the Groundwater Directive, the QAQC Directive, or the WFD Regulations, and not otherwise defined in these Directions has the same meaning for the purposes of these Directions as it has for the purposes of the applicable Directive or the Regulations.

Directions for the classification of surface water and groundwater bodies

3. The Appropriate Agency must classify—

(a) the ecological status of a body of surface water (other than one designated as artificial or heavily modified) in accordance with Part 1 of Schedule 1;

(b) the ecological potential of a body of surface water designated as artificial or heavily modified in accordance with Part 2 of Schedule 1;

(c) the chemical status of a body of surface water in accordance with Part 3 of Schedule 1; and

(d) the chemical and quantitative status of a body of groundwater in accordance with Schedules 4 and 5.

4. In performing its functions under article 3, the Appropriate Agency must—

(a) discount data influenced by a one-off or transient incident which, if used, would lead to an unrepresentative classification of a water body's status; and

(b) estimate the level of confidence and precision of the classification results, and report on this to the Secretary of State, or the Welsh Ministers, as appropriate.

Reviewing the classifications

5. The Appropriate Agency must, as applicable and at least once every 6 years, review and update the classification of water bodies as new data are collected through its monitoring programmes, and if appropriate from other sources, in accordance with article 8 and Annex 5 of the Water Framework Directive.

Monitoring

6. The Appropriate Agency must, in order to ensure that the classification results reflect any impact on the ecological quality of the water environment that is of sufficient spatial extent to affect ecological status, ensure, as far as reasonably possible, that the monitoring data and modelling results it uses in classification are representative of the water body as a whole.

Standards for surface water bodies

7. Articles 8 to 10 set out the Directions to the Appropriate Agency for the purposes of implementing the Water Framework Directive and the EQS Directive in relation to—

(a) the setting of environmental objectives in accordance with Article 4(1) of the Water Framework Directive for each body of surface water in each river basin district;

(b) preparing the programme of measures to achieve or maintain those objectives;

(c) reviewing the categorisation of water bodies by type;

(d) monitoring and classifying the status of each water body in each river basin district; and

(e) controlling pollution of surface waters by priority substances and other substances discharged into surface water.

8. In relation to a surface water body, the Appropriate Agency must—

(a) categorise the water body, by type, in accordance with Schedule 2;

(b) apply physico-chemical standards in accordance with Part 1 of Schedule 3;

(c) apply the environmental quality standards specified for specific pollutants in accordance with Part 2 of Schedule 3;

(d) apply the environmental quality standards specified for priority substances and other pollutants in accordance with Part 3 of Schedule 3; and

(e) apply the biological element status boundary values in accordance with Part 4 of Schedule 3

9. In an artificial or heavily modified water body, except where a quality element is so affected by the use and modified characteristics of that body as to make it inappropriate to do so, the quality elements and standards applicable to that water body, shall be those applicable to the surface water body type most closely comparable to that water body.

10. For the purposes of Article 4(2) of the Water Framework Directive, where an environmental standard has been specified for a parameter or quality element as regards any protected area, or part of such area, of a type referred to in section 1 of Annex IV to the Water Framework Directive, and that environmental standard is more stringent than the equivalent environmental standard specified in the Schedule to these Directions in respect of the same parameter or quality element, then the Appropriate Agency must apply the more stringent standard.

Groundwater bodies

11. The Appropriate Agency must apply the threshold values for groundwater in Table 1 in Schedule 5 to a body of groundwater and, if any threshold value is exceeded, undertake an appropriate investigation to determine whether or not the applicable conditions for good groundwater chemical status are met in accordance with the procedure set out in Article 4 of the Groundwater Directive.

Further directions about priority substances

12. The Appropriate Agency must—

(a) conduct a long-term trend analysis of concentrations of those priority substances listed in Table 1 in Part 3 to Schedule 3 that tend to accumulate in sediment and/or biota, in accordance with paragraphs 9 to 11 of that Part and Article 3(6) of the EQS Directive;

(b) in accordance with paragraphs 18 to 20 of Part 3 of Schedule 3, monitor and report to the Commission on the substances included in the Commission's watch list in accordance with Article 8b of the EQS Directive; and

(c) maintain an inventory of emissions, discharges and losses of priority substances in accordance with paragraph 21 of Part 3 of Schedule 3.

Solway Tweed river basin district

13.—(1) In relation to the Solway Tweed River Basin District, in order to ensure a common approach, the Environment Agency must act jointly with the Scottish Environment Protection Agency and may, as necessary, adapt the requirements of these Directions for that purpose.

(2) In this Direction, "Solway Tweed River Basin District" means the area identified in regulation 3 of the Water Environment (Water Framework Directive) (Solway Tweed River Basin District) Regulations 2004(**a**).

Revocations

14. The following Directions are revoked with effect from 22nd December 2015—

(a) the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive) (England and Wales) Directions 2010; and

(b) the River Basin Districts Surface Water and Groundwater Classification (Water Framework Directive) (England and Wales) Direction 2009.

Signed by the Authority of the Secretary of State

David Cooper
A Senior Civil Servant in the Department for Environment, Food and Rural Affairs

9th September 2015

Signed by the Authority of the Welsh Ministers

Prys Davies
Head of Energy, Water and Flood Division under authority of the Minister for Natural Resources

9th September 2015

(**a**) S.I. 2004/99.

SCHEDULE 1

Article 3(a)-(c)

Classification of status of surface water bodies

PART 1

Determining the ecological status of a body of surface water (other than one designated as artificial or heavily modified)

1.—(1) To classify the ecological status of a body of surface water (other than one designated as artificial or heavily modified) the Appropriate Agency must—

(a) using monitoring or modelling, estimate the representative values of appropriate indicators for the relevant biological, physico-chemical and hydromorphological quality elements in the water body; and

(b) compare those representative values with the applicable standards and boundary values in Schedule 3.

(2) In paragraph 1(1)(a) above, the appropriate indicators may, in particular, include—

(a) indicators of the biological and other quality elements expected to be most sensitive to the pressures to which the water body is subject;

(b) the concentrations of those specific pollutants likely to be in the water body in quantities that could cause a failure of a specific pollutant standard;

(c) the values for those other physico-chemical quality elements at risk of being so altered as to be failing a physico-chemical standard; and

(d) the values or criteria for hydromorphological elements relevant to high status in Part 4 of this Schedule.

2.—(1) The ecological status of the water body must be classified as high if—

(a) the values of all the indicators of biological and physico-chemical quality elements estimated in the process described in paragraph 1(1), and concentrations of specific pollutants, comply with the highest corresponding standard given in Schedule 3;

(b) the water body is classified as high status for hydromorphological quality elements under Part 4 of this Schedule; and

(c) there is no evidence that any high impact invasive non-native species listed in Table 1 below has become established in the water body.

(2) The ecological status of a water body is not to be classified as lower than moderate by reason only of any quality element for a specific pollutant or any physico-chemical quality element in that water body being of a standard lower than moderate.

(3) In any case other than sub-paragraphs (1) and (2), the ecological status must be classified according to the lowest classed biological or physico-chemical or specific pollutant quality element.

(4) In sub-paragraph (1)(c), "established" means the listed species has a self-sustaining population in the water body.

Table 1

High Impact (or not yet reviewed) Invasive Non-native species	
Australian swamp stonecrop	Crassula helmsii
Floating pennywort	Hydrocotyle ranunculoides
Water fern	Azolla filiculoides
Parrot's feather	Myriophyllum aquaticum
Curly water-thyme	Lagarosiphon major
Water primrose	Ludwigia grandiflora
Canadian pondweed	Elodea canadensis
Nuttall's pondweed	Elodea nuttallii
North American signal crayfish	Pacifastacus leniusculus
Freshwater amphipod	Dikerogammarus villosus
Freshwater amphipod	Dikerogammarus haemobaphes
Mysid crustacean	Hemimysis anomola
Zebra mussel	Dreissena polymorpha
Topmouth gudgeon	Pseudorasbora parva
Red swamp crayfish	Procambarus clarkii
Virile crayfish	Orconectes virilis
Goldfish	Carassius auratus
Common Carp	Cyprinus carpio
Common cord-grass, Townsend's grass or ricegrass	Spartina anglica
Chinese mitten crab	Eriocheir sinensis
Slipper limpet	Crepidula fornicata
Leathery sea squirt	Styela clava
American oyster drill	Urosalpinx cinerea
Carpet Seasquirt	Didemnum vexillum
Chinese mitten crab	Eriocheir sinensis
Colonial tunicate	Non-native Didemnum spp
Marine tubeworm	Ficopomatus enigmaticus
Japanese knotweed	Fallopia japonica
Japanese Knotweed/Giant Hogweed hybrid	Fallopia x bohemica
Himalayan balsam	Impatiens glandulifera
Giant hogweed	Heracleum mantegazzianum
Rhododendron	Rhododendron ponticum

PART 2

Determining the ecological potential of a body of surface water designated as being artificial or heavily modified

1.—(1) To classify the ecological potential of a body of surface water which has been designated as heavily modified or artificial, the Appropriate Agency must—

(a) using monitoring or modelling, estimate the representative values of the appropriate indicators for the relevant biological and physico-chemical quality elements in the water body; and

(b) compare those values with the standards set out in Schedule 3 and

(c) determine whether or not all practicable mitigation is being taken to improve the modified or artificial hydromorphological characteristics of the body, other than those which would have a significant adverse impact on—

(i) the use served by the modified or artificial characteristics; or

(ii) the wider environment.

(2) In paragraph 1(1)(a), the appropriate indicators must, in particular, include—

(a) indicators of the biological quality elements which are not sensitive to the artificial or heavily modified characteristics of the water body;

(b) the concentrations of those specific pollutants likely to be in the water body in quantities that could cause that water body to fail a specific pollutant standard; and

(c) the values for those other physico-chemical quality elements not sensitive to the heavily modified or artificial characteristics of the water body that are at risk of being so altered as to cause a failure of a physico-chemical standard.

(3) When determining whether all practicable mitigation has been taken under sub-paragraph (1)(c) above, the Appropriate Agency may exclude mitigation measures which would contribute only a very minor improvement in the ecology of the water body.

2.—(1) The ecological potential of the water body must be classified as good or maximum if -

(a) none of the values of the indicators of those quality elements not sensitive to the heavily modified or artificial characteristics of the water body, including biology, specific pollutants and other physico-chemical quality elements are less than good; and

(b) all practicable mitigation referred to in paragraph 1(1)(c) is in place.

(2) The ecological potential of the water body must be classified as moderate if —

(a) none of the values of the indicators of those quality elements not sensitive to the hydromorphological conditions of the water body, including biology, specific pollutants, and other physico-chemical quality elements are less than moderate; and

(b) sub-paragraph (1) above does not apply.

(3) The ecological potential of the water body must be classified as poor if—

(a) none of the values of the indicators of those biological quality elements not sensitive to the hydromorphological conditions of the water body, are less than poor; and

(b) sub-paragraphs (1) or (2) above do not apply.

(4) The ecological potential of the water body must be classified as bad if the value of one or more of the indicators of those biological quality elements not sensitive to the hydromorphological conditions of the water body is less than poor.

PART 3

Determining the chemical status of a body of surface water

1.—(1) To classify the chemical status of a body of surface water the Appropriate Agency must—

(a) using monitoring or modelling, estimate the concentrations in the water body of all the appropriate substances listed in Part 3 of Schedule 3; and

(b) compare those concentrations with the applicable standards in that Part.

(2) In sub-paragraph (1)(a) above, "appropriate substances" includes all those substances likely to be in the water body in quantities that could cause a failure of the corresponding environmental quality standard.

2. The chemical status of the water body must be classified as good unless the standard for one or more substances is failed, in which case the water body must be classified as failing to achieve good chemical status.

PART 4

Determining high status for hydromorphological quality elements in a water body

SECTION 1

Introductory

1. To determine whether a surface water body may be classified as high status for hydromorphological quality elements, the Appropriate Agency must assess the morphological and hydrological condition of that water body in accordance with paragraphs 3 and 4.

2. The status of the water body must be classified as high status if there are no, or only very minor, anthropogenic alterations to the relevant hydromorphological quality elements.

3. In relation to morphological conditions for surface water bodies, the Appropriate Agency must assess the extent of anthropogenic alterations affecting those water bodies using all relevant criteria set out in sections 2, 3 and 4 below.

4. In relation to hydrological conditions for surface water bodies, the Appropriate Agency must assess the extent of anthropogenic alterations affecting those water bodies using all relevant criteria set out in section 5 below.

5. In this Schedule, "hydromorphological quality elements" means the hydrological regime, tidal regime, river continuity and morphological conditions as listed in Annex V of the Water Framework Directive.

SECTION 2

Determining high status Morphological Conditions for Rivers

6. To assess the morphological condition of any river water body the Appropriate Agency must consider both the direct and indirect pressures on the morphological quality elements of that water body.

7. The morphological condition status of any river water body must not be classified as high if the water body—

(a) has been identified as being at risk of failing to achieve good ecological status due to the extent of morphological pressures; or

(b) is an artificial or heavily modified river water body.

8. For any river water body that has not been excluded by the criteria set out in paragraph 7, the Appropriate Agency must undertake a detailed assessment, in accordance with paragraph 9, to ascertain whether high status morphological conditions are present within that water body.

9. In undertaking the detailed assessment, the Appropriate Agency must consider the nature and extent of impacts to river morphological conditions, taking account of—

(a) the extent of direct physical modification of the river beds or banks;

(b) the presence of structures that prevent or limit migration of aquatic organisms and sediment transport;

(c) the presence of flood defence structures and embankments

(d) the structure, condition and extent of riparian zone vegetation;

(e) land use and land management, including agriculture and built development on land adjacent to the river network and within the water body catchment area.

SECTION 3

Determining high status morphological conditions for lakes

10. To assess the morphological condition of any lake water body, the Appropriate Agency must consider both the direct and indirect pressures on the morphological quality elements of that water body.

11. The morphological condition status of any lake water body must not be classified as high if the water body—

(a) has been identified as being at risk of failing to achieve good ecological status due to the extent of morphological pressures; or

(b) it has been designated as artificial or heavily modified.

12. For any lake water body that has not been excluded by the criteria in paragraph 11, the Appropriate Agency must undertake a detailed assessment, in accordance with paragraph 13, to ascertain whether high morphological status conditions are present within that water body.

13. In undertaking the detailed assessment, the Appropriate Agency must assess the extent of the impacts resulting from changes to the morphological conditions in the lake water body taking account of—

(a) physical modification to the beds or banks;

(b) the presence of flow and sediment altering structures;

(c) the presence of structures at the lake outfall;

(d) the presence of flood embankments;

(e) the presence of a causeway;

(f) evidence that there has been reduction of lake area due to land reclamation;

(g) catchment land use (the extent of the catchment that is developed or used for intensive agriculture, horticulture or forestry);

(h) dumping of waste materials and fill into the lake;

(i) significant cutting or removal of macrophytes;

(j) recreational pressures.

SECTION 4

Determining high status morphological conditions for transitional and coastal waters

14. To assess the morphological condition of any transitional or coastal water body, the Appropriate Agency must consider both the direct and indirect pressures on the morphological quality elements of that transitional or coastal water body.

15. The morphological condition status of any transitional or coastal water body must not be classified as high if the water body—

(a) has been identified as being at risk of failing to achieve good ecological status due to the extent of morphological pressures; or

(b) exceeds the UKTAG (2008) Morphological Condition Limit of 5%(a).

16. For any transitional or coastal water body that has not been excluded by the criteria in paragraph 15, the Appropriate Agency must undertake a detailed assessment, to ascertain whether high status morphological conditions are present within that water body, taking account of the nature and extent of impacts to morphological conditions from—

(a) flood defence embankments;

(b) shoreline reinforcement;

(**a**)http://www.wfduk.org/sites/default/files/Media/Environmental%20standards/Environmental%20standards%20phase%202_Final_110309.pdf

(c) aggregate extraction activity;

(d) maintenance and capital dredging;

(e) land claim;

(f) shellfishery and fin fishery activity causing physical disturbance to the benthic environment;

(g) alterations to flow and sediment dynamics;

(h) other structures resulting in direct removal of sediment or displacement of habitat.

SECTION 5

Determining high status hydrological conditions for river, lake and transitional Water bodies

17. To assess the hydrological condition of any water body, the Appropriate Agency must consider the nature and extent of anthropogenic alterations to the hydrological regime of that water body.

18.—(1) Subject to sub-paragraph (2), the hydrological status of a water body must be classified as high if it meets the criteria for high status in each of the following tests—

(a) abstraction test - the total quantity of upstream abstraction is less than 5% of the Qn95 flow at the water body outflow point, including non-consumptive abstraction;

(b) discharge test - the total upstream discharges is less than 5% of the Qn95 flow at the water body outflow point, including local return of water associated with abstractions and dry weather flows from sewage treatment works;

(c) flow regulation test - the total surface area of reservoirs in the upstream catchment is less than 1% of the total catchment area;

(d) urbanisation influence test - the total area of urban and sub-urban land within the total upstream catchment is less than 20% of the total upstream catchment area, and the total area of urban land within the total upstream catchment is less than 10% of the total upstream catchment area; and

(e) in relation to a lake water body only, there must be no more than a 1% daily maximum reduction in the reference condition lake surface area on 99% of days per year.

(2) In sub-paragraphs (1)(a) and (b), the status of any water body must not be classified as high unless the hydrological regime for both total abstraction and total discharge is less than 5% of Qn95.

(3) In sub-paragraph (1), Qn95 is the level of flow at the point of measurement exceeded for 95% of the time over a ten year period.

(4) In sub-paragraph (1)(e)—

(a) "lake surface area" means—

(i) the area of the lake's surface overlying water from the shore out to a depth 5 metres deeper than the depth at which rooted plants or bottom-living algae grow; or

(ii) if the deepest part of the lake is shallower than this, the whole area of the lake's surface.

(b) with respect to paragraph (a)(i), in the absence of reliable information on the depth to which rooted plants or bottom-living algae grow under reference conditions, the depth out to which surface area is measured in lakes of the geological sub-type "peat" may be taken to be 7 metres. For all other lakes, it may be taken to be 12 metres;

(c) "reference condition" means—

(i) for non-heavily modified lakes, the absence of any pressures that could affect the surface area of the lake or any pressures that could affect the depth at which rooted plants or bottom-living algae are able to grow. Reference conditions should be representative of the current standard UK Meteorological Office climate reference period;

(ii) for heavily modified lakes, conditions consistent with good ecological potential.

(d) a lake is of geological sub-type peat where—

(i) its mean water colour is more than 90 hazen units; or

(ii) where information on colour is unavailable, more than 75% of the soils of its catchment area are comprised of peat.

(5) In relation to transitional water bodies, the tests in sub-paragraph (1) should be applied to the main freshwater inflow and the majority of minor inflows.

SCHEDULE 2

Article 8

Categorisation of surface water body types

SECTION 1

Rivers

1.—(1) To determine the dissolved oxygen, biochemical oxygen and ammonia standards or condition limits applicable to a river, or part of a river, the Appropriate Agency must categorise the river, or part of such river, by type, dependent on its altitude and alkalinity, in accordance with Table 1.

(2) To determine the temperature, dissolved oxygen, and biochemical oxygen standards applicable to a river, or part of a river, the Appropriate Agency must categorise the river, or part of such river, as salmonid or cyprinid.

(3) To determine the acid condition standards or condition limits or benthic invertebrate fauna (Acid Water Indicator Community) values applicable to a river, or part of a river, the Appropriate Agency must categorise the river, or part of such river, by type, dependent on its annual mean concentration of dissolved organic carbon, in accordance with Table 2.

Table 1

Criteria for identifying the types of river to which the dissolved oxygen, biochemical oxygen demand and ammonia standards for rivers apply					
Site Altitude	*Alkalinity (as mg/l $CaCO_3$)*				
	Less than 10	≥10 to <50	≥50 to <100	≥100 to <200	Over 200
Under 80 metres	Type 1	Type 2	Type 3	Type 5	Type 7
Over 80 metres			Type 4	Type 6	

Table 2

Criteria for identifying types of rivers to which the acid neutralising capacity standards for rivers apply	
Type	*Annual mean concentration of dissolved organic carbon in mg/l*
Clear	≤10
Humic	>10

SECTION 2

Lakes

2.—(1) To determine the dissolved oxygen standards or condition limits applicable to a freshwater lake or any part of such lake, the Appropriate Agency must categorise the lake, or part of that lake, as cyprinid or salmonid.

(2) To determine the ammonia standards or condition limits applicable to a freshwater lake or any part of such lake, the Appropriate Agency must categorise the lake, or part of the lake, by type, dependent on its altitude and alkalinity, in accordance with Table 3.

(3) To determine the appropriate total phosphorus standard to apply to a freshwater or brackish lake, or any part of such lake, the Appropriate Agency must categorise the lake by its—

(a) geographical region shown in the table in Schedule 6;

(b) geological category of each lake in accordance with sub-paragraphs (4) and (5); and

(c) depth in accordance with Table 4 below.

(4) A brackish lake must be categorised as the geological category "high alkalinity".

(5) The geological category of a freshwater lake must, subject to sub-paragraph (6), be determined in accordance with Table 5 by—

(a) the annual mean alkalinity range; or

(b) where the annual mean alkalinity range is not known, the annual mean conductivity; or

(c) where there is insufficient alkalinity or conductivity data lake to determine the geological category by paragraphs (a) and (b) above, by the solid geology of the catchment.

(6) The solid geology of the catchment must be used to determine whether the geological category is "high alkalinity" or "marl" where—

(a) the annual mean alkalinity range is used under sub-paragraph (5)(a) above, and the annual mean alkalinity is greater than 1000 microequivalents per litre; or

(b) where the annual mean conductivity range is used under sub-paragraph (5)(b) above, and the annual mean alkalinity is greater than 1000 microequivalents per litre.

Table 3

Criteria for identifying the types of lakes to which the ammonia standards for lakes apply					
Site Altitude	*Alkalinity (as mg/l CaCO3)*				
	Less than 10	≥10 to <50	≥50 to <100	≥100 to <200	Over 200
Under 80 metres	Type 1	Type 2	Type 3	Type 5	Type 7
Over 80 metres			Type 4	Type 6	

Table 4

Depth characteristics used to identify depth categories to which the lake phosphorus standards apply	
Depth category	Mean depth (metres)
Very shallow	< 3
Shallow	3 - 15
Deep	> 15

Table 5

Geological characteristics used to identify geological categories to which the lake total phosphorus standards apply			
Geological category	*Annual mean alkalinity Micro-equivalents per litre*	*Annual mean conductivity Micro Siemens per centimetre*	*Solid geology of the catchment of the [lake] (% of catchment)*
Low alkalinity	< 200	≤ 70	> 90% siliceous
Moderate alkalinity	200 - 1000	> 70 - 250	> 50% siliceous and ≤ 90% siliceous
High alkalinity	> 1000	> 250 - 1000	≥ 50% calcareous
Marl	> 1000	> 250 - 1000	> 65% limestone

SECTION 3

Transitional and coastal water

3. To determine the dissolved inorganic nitrogen standards or condition limits applicable to transitional or coastal water or part of such water, the Appropriate Agency must categorise the water by type, dependent on the annual mean concentration of suspended particulate matter, in accordance with Table 6.

Table 6

Criteria for identifying types of transitional and coastal water to which the dissolved inorganic nitrogen standards for transitional and coastal water apply	
Type	*Annual mean concentration of suspended particulate matter (mg/l)*
Very turbid	> 300
Turbid	100 - 300
Intermediate turbidity	10 < 100
Clear	< 10

SCHEDULE 3

Article 8

Standards for ecological and chemical status of surface waters

PART 1

Physico-chemical standards

SECTION 1

Rivers

1.—(1) Where the Appropriate Agency has categorised a river, or part of a river, by type, in accordance with paragraphs 1(1) and 1(2) of Schedule 2 it must apply the relevant dissolved oxygen standards for high, good, moderate or poor to that river or part of such river, in accordance with Table 1.

(2) Where the Appropriate Agency has categorised a river, or part of a river, by type in accordance with paragraphs 1(1) and 1(2) of Schedule 2, the Appropriate Agency must apply the relevant biochemical oxygen demand standards for high, good, moderate or poor to that river or part of such river, in accordance with Table 2.

(3) For all river types, the Appropriate Agency must apply the high or good, moderate or poor acid condition standards in accordance with Table 3.

(4) Where the Appropriate Agency has categorised a river, or part of a river, by type in accordance with paragraph 1(3) of Schedule 2, it must apply the standards for acid neutralising capacity for high or good, moderate or poor in accordance with Table 4.

(5) For all rivers or parts of rivers, the Appropriate Agency must apply the standards for phosphorus for high or good, moderate or poor calculated in accordance with Table 5

(6) Where the Appropriate Agency has categorised a river, or part of a river, by type in accordance with paragraph 1(2) of Schedule 2, the Appropriate Agency must apply the relevant temperature standards for high, good, moderate or poor in accordance with Table 6.

(7) Where the Appropriate Agency has categorised a river, or part of a river, by type in accordance with paragraph 1(1) of Schedule 2, the Appropriate Agency must apply the relevant ammonia standards for high, good, moderate or poor to that river or part of such river, in accordance with Table 7.

Table 1

Dissolved oxygen standards in rivers (rivers categorised by type in accordance with paragraphs 1(1) and 1(2) of Schedule 2)				
Dissolved Oxygen (percent saturation)				
(10 percentile)				
Type	High	Good	Moderate	Poor
1, 2, 4 and 6 and salmonid	80	75	64	50
3, 5 and 7	70	60	54	45

Table 2

Biochemical oxygen demand (BOD) standards for rivers[i] (rivers categorised by type in accordance with paragraphs 1(1) and 1(2) of Schedule 2)				
Biochemical Oxygen Demand (mg/1)				
(90 percentile)				
Type	High	Good	Moderate	Poor
1, 2, 4, 6 and salmonid	3	4	6	7.5
3, 5 and 7	4	5	6.5	9

[i] Biochemical Oxygen Demand must not be used in classifying the status of water bodies.

Table 3

Acid conditions standards in rivers			
pH – all river types in England and Wales			
High	Good	Moderate	Poor
5 and 95 percentile		10 percentile	10 percentile
>=6 to <=9		4.7	4.2

Table 4

Acid neutralising capacity (ANC)[i]standard in rivers as annual mean values (rivers categorised by type in accordance with paragraph 1(3) of Schedule 2)		
Status	*Clear water*	*Humic waters*
High	80	80
Good	40	50
Moderate	15	10
Poor	-10	5

[1] ANC is calculated by the Cantrell Method.

Table 5

Phosphorus Standards in Rivers[i]	
Annual mean reactive phosphorus concentration (in µg per litre) is calculated as follows:	
High	10 to the power of ((1.0497 x $\log_{10}$(0.702)+1.066) x ($\log_{10}$(RP_{ref}) – $\log_{10}$ (3,500)) + $\log_{10}$(3,500))
Good	10 to the power of ((1.0497 x $\log_{10}$(0.532)+1.066) x ($\log_{10}$(RP_{ref}) – $\log_{10}$(3,500)) + $\log_{10}$(3,500))
Moderate	10 to the power of ((1.0497 x $\log_{10}$(0.356)+1.066) x ($\log_{10}$(RP_{ref}) – $\log_{10}$(3,500)) + $\log_{10}$(3,500))
Poor	10 to the power of ((1.0497 x $\log_{10}$(0.166)+1.066) x ($\log_{10}$(RP_{ref}) – $\log_{10}$(3,500)) + $\log_{10}$(3,500))

[i]In this table, "Reactive phosphorus concentration" means the concentration of phosphorus as determined using the phosphomolybdenum blue colorimetric method. Where necessary to ensure the accuracy of the method, samples are recommended to be filtered using a filter not smaller than 0.45 µm pore size to remove gross particulate matter.

"RPref" represents the annual mean concentration of reactive phosphorus in µg/l estimated for the site under reference conditions using the equation: 10 to the power of (0.454 ($\log_{10}$Alkalinity) – 0.0018 (Altitude) + 0.476). If the value calculated for RPref using the equation above is less than 7 µg/l, it must be substituted for the purposes of calculating the standards for phosphorus by a value of 7 µg/l. For the purposes of calculating RPref:

(i) "Alkalinity" is the concentration of CaCO3 in mg/l. If a site has an alkalinity greater than 250 mg/l CaCO3, a value for alkalinity of 250 must be used for the purposes of calculating RPref. If a site has an alkalinity of less than 2, a value for alkalinity of 2 must be used for the purposes of calculating RPref.

(ii) "Altitude" means the site's altitude above mean sea level in metres. If a site has an altitude of greater than 355 metres, a value for altitude of 355 metres must be used for the purposes of calculating RPref.

Table 6

Temperature standards for rivers (rivers categorised by type in accordance with paragraph 1(2) of Schedule 2)								
	High		*Good*		*Moderate*		*Poor*	
River temp type	*Salmonid*	*Cyprinid*	*Salmonid*	*Cyprinid*	*Salmonid*	*Cyprinid*	*Salmonid*	*Cyprinid*
River temp (°C) as an annual 98-percen-tile standard	20	25	23	28	28	30	30	32
Increase or decrease in temp (°C) in relation to the ambient river temp, as an annual 98 percentile standard[(i)]	2	2	3	3	-	-	-	-

[(i)] The high and good standards specified for the increase or decrease in temp must not be used for the purpose of classifying the status of bodies of surface water except where the water receives consented thermal discharges.

Table 7

Ammonia standards for rivers (rivers categorised by type in accordance with paragraph 1(1) of Schedule 2)				
Total Ammonia as nitrogen (mg/1)				
(90 percentile)				
Type	High	Good	Moderate	Poor
1, 2, 4 and 6	0.2	0.3	0.75	1.1
3, 5 and 7	0.3	0.6	1.1	2.5

SECTION 2

Lakes

2.—(1) Where the Appropriate Agency has categorised a freshwater lake, or part of such lake, by type, in accordance with paragraph 2(1) of Schedule 2, the Appropriate Agency must apply the relevant dissolved oxygen standards for high, good, moderate or poor in accordance with Table 8.

(2) For all lakes, or parts of lakes, the Appropriate Agency must apply the relevant ammonia standards for high, good, moderate or poor to that lake, or part of such lake, in accordance with Table 9.

(3) Subject to sub-paragraph (4) below, the Appropriate Agency must apply the high or good, acid condition standards in accordance with Table 10.

(4) Where the reference condition established in accordance with section 1.3 of Annex II of the Water Framework Directive is ≤ 20 micro-equivalents per litre of acid neutralising capacity, the Appropriate Agency must apply an appropriate value of between 0 and 20 micro-equivalents per litre (inclusive) that is protective of the lake, or part of lake, and which reflects reference conditions, instead of applying the standards in Table 10.

(5) For a freshwater lake with no natural saline influence, or part of such a lake, the Appropriate Agency must apply the salinity standard for good specified in Table 11.

(6) For a freshwater lake, or part of such a lake, the Appropriate Agency must, subject to sub-paragraphs (8) to (10) below, apply the total phosphorus standard for high, good, moderate or poor, in accordance with the formulæ specified in Table 12.

(7) In the formulæ referred to in sub-paragraph (6)—

"R" represents the annual mean total phosphorus concentration expected for the lake in the absence of more than very minor phosphorus inputs to the lake resulting from human activities; and, where a reliable estimate of "C" is available, "R" shall have the value given by the formula: Antilog10 [I - (0.09 × A) + (0.24 × B)]; or 35, whichever is the smaller value;

"A" = Log10 of the altitude in metres above mean sea level of the lake;

"B" = Log10(C /D);

"C" is the mean alkalinity of the lake in milliequivalents per litre estimated for the lake when—

(aa) its acid neutralising capacity is at least good; and

(bb) its alkalinity has not been otherwise altered as a result of point or diffuse pollution;

"D" = the mean depth of the lake in metres;

"H" = 0.755 + (0.012 × C) - (0.001 × D); or 0.7, whichever is the larger value; and

"G" = 0.506 + (0.023 × C) - (0.002 × D); or 0.46, whichever is the larger value.

"I" = 1.36 in region 1 of the specified lakes and 1.55 in region 2 of the specified lakes.

(8) Where the Appropriate Agency has categorised a lake, or part of a lake, as being of the geological category Marl, in accordance with paragraph 2(6) of Schedule 2, it must apply the total phosphorus standard for high, good, moderate or poor specified in Table 13 according to the geographic region, geological and depth categories of the lake or part.

(9) If the value of "C" in sub-paragraph (7) cannot be reliably estimated for the purpose of calculating the value "R", the Appropriate Agency must either—

(a) use an alternative method for estimating the value "R", provided that, for other lakes for which the value "C" can be reliably estimated, that alternative method produces an equivalently unbiased estimate of the value "R" to that produced by the application of the formula specified in sub-paragraph (7); or

(b) apply the procedure specified in sub-paragraph (10).

(10) Where there is insufficient data to calculate the total phosphorus standard applicable to a lake, or part of a lake, in accordance with sub-paragraph (8) or (9)(a), the Appropriate Agency must apply the total phosphorus standard for high, good, moderate or poor specified in Table 13 according to the geographic region, geological and depth categories of the lake or part.

Table 8

Dissolved oxygen standards for freshwater lakes (lakes categorised by type in accordance with paragraph 2(1) of Schedule 2)		
Status	*Mean in July – August (mg/l*[(i)]	
	Salmonid	*Cyprinid*
High	9	8
Good	7	6
Moderate	4	4
Poor	1	1

[(i)] The mean for mixed lakes is throughout the whole water column and the mean for stratified lakes is for readings taken in the hypolimnion.

Table 9

Ammonia standards for lakes (lakes categorised by type in accordance with paragraph 2(2) of Schedule 2)				
Total Ammonia as nitrogen (mg/1)				
(90 percentile)				
Type	High	Good	Moderate	Poor
1, 2, 4, and 6	0.2	0.3	0.75	1.1
3, 5 and 7	0.3	0.6	1.1	2.5

Table 10

Acid condition standards for freshwater lakes	
High	Good
Acid Neutralising Capacity (micro equivalents per litre) as annual mean values	
> 40	> 20

Table 11

Salinity standards for freshwater lakes with no natural saline influence	
Status	*Boundary*
	Annual mean (micro Siemens per centimetre
Good	1000

Table 12

Standards for total phosphorus standards for freshwater and brackish lakes			
Annual mean total phosphorus concentration (ug/1)			
High	*Good*	*Moderate*	*Poor*
(R ÷ H) or 5, whichever is the larger value	(R ÷ G) or 8, whichever is the larger value	[(R ÷ G) ÷ 0.5] or 16, whichever is the larger value	[(R ÷ G) ÷ 0.25] or 32, whichever is the larger value

Table 13

Type-specific total phosphorus standards for freshwater and brackish lakes where the standards specified in Table 12 do not apply (lakes categorised by type in accordance with paragraph 2(3) of Schedule 2)				
Type	*Annual mean concentration of total phosphorus (ug/1)*			
Geological and depth category	High	Good	Moderate	Poor
High alkalinity; shallow - Region 1	16	23	46	92
High alkalinity; shallow - Region 2	25	35	70	140
High alkalinity; very shallow – Region 1	23	31	62	124
High alkalinity; very shallow - Region 2	35	49	98	196
Moderate alkalinity; deep	8	12	24	48
Moderate alkalinity; shallow	11	16	32	64
Moderate alkalinity; very shallow	15	22	44	88
Low alkalinity; deep	5	8	16	32
Low alkalinity;shallow	7	10	20	40
Low alkalinity; very shallow	9	14	28	56
Marl; shallow	9	20	40	80
Marl; very shallow	10	24	48	96

SECTION 3

Transitional and Coastal Waters

3.—(1) In respect of transitional and coastal water, or part of such water, with salinities normalised to 35, the Appropriate Agency must apply the dissolved oxygen standards for high, good, moderate or poor in accordance with Table 14.

(2) In respect of transitional or coastal water, or part of such water, with salinities <35, the Appropriate Agency must apply the formula for the dissolved oxygen standards for high, good, moderate or poor in accordance with Table 15.

4.—(1) For coastal water, or part of such water, with mean salinities for the period 1st November to 28th February (the "sampling period") in the range 30 to <34.5, and categorised in accordance with paragraph 3 of Schedule 2 as being of the Type "clear", the Appropriate Agency must—

(a) derive, for each compliance assessment period, an equation for the linear regression line, $y = mx + c$;

(b) use the regression equation so derived to calculate the arithmetic mean concentration of dissolved inorganic nitrogen at salinity 32 for the compliance assessment period; and

(c) apply the high, good, moderate or poor dissolved inorganic nitrogen standard specified in Table 16.

(2) For the purposes of sub-paragraph (1)—

"the regression line" describes the linear relationship between the variables, dissolved inorganic nitrogen and salinity in the coastal water;

"y" is dissolved inorganic nitrogen concentration in micromoles per litre;

"x" is salinity;

"m" is the slope of the regression line;

"c" is the value of "y" when "x" = 0; and

"compliance assessment period" is a number of consecutive sampling periods from which measured values are obtained for the purposes of calculating an overall arithmetic mean.

(3) For coastal water, or part of such water, categorised, in accordance with paragraph 3 of Schedule 2, as being of the Type, "intermediate turbidity", "turbid" or "very turbid", the Appropriate Agency must apply—

(a) the corresponding good, moderate or poor dissolved inorganic nitrogen standard specified in Table 16 to the coastal water or part; or

(b) the high dissolved inorganic nitrogen standard specified in Table 16 in relation to the arithmetic mean concentration of dissolved inorganic nitrogen at salinity 32 for the compliance assessment period calculated according to the procedure described in sub-paragraph (1).

(4) For transitional water, or part of such water, categorised, in accordance with paragraph 3 of Schedule 2, as being of the Type "clear", the Appropriate Agency must—

(a) derive, for each compliance assessment period, an equation for the linear regression line, $y = mx + c$;

(b) use the regression equation so derived to calculate the arithmetic mean concentration of dissolved inorganic nitrogen at salinity 25 for the compliance assessment period; and

(c) apply the high, good, moderate or poor dissolved inorganic nitrogen standard specified in Table 17.

(5) For the purposes of sub-paragraph (4)—

"the regression line" describes the linear relationship between the variables, dissolved inorganic nitrogen and salinity in the transitional water, or part, resulting from the increasing dilution of dissolved inorganic nitrogen inputs towards the seaward limit of the transitional water;

"y", "x" and "c" have the same meaning as they do in sub-paragraph (2); and

"compliance assessment period" is a number of consecutive sampling periods from which measured values are obtained for the purposes of calculating an overall arithmetic mean.

(6) For transitional water, or part of such water, categorised, in accordance with paragraph 3 of Schedule 2, as being of the Type "intermediate", "turbid" or "very turbid", the Appropriate Agency must apply—

(a) the corresponding good, moderate or poor dissolved inorganic nitrogen standard specified in Table 17 to the transitional water or part; or

(b) the high dissolved inorganic nitrogen standard specified in Table 17 in relation to the arithmetic mean concentration of dissolved inorganic nitrogen at salinity 25 for the compliance assessment period calculated according to the procedure described in sub-paragraph (1).

Table 14

Dissolved oxygen standards for transitional and coastal water with salinities normalised to 35	
Boundaries	*Dissolved oxygen concentrations (mg/l) as 5 percentile values*
High	5.7
Good	4.0
Moderate	2.4
Poor	1.6

Table 15

Dissolved oxygen standards for transitional and coastal water with salinities < 35	
Boundaries	*Dissolved Oxygen concentrations (mg/l) as 5 percentiles*
High	=7 – (0.037 x (salinity))
Good	=5 – (0.028 x (salinity))
Moderate	=3 – (0.017 x (salinity))
Poor	=2 – (0.011 x (salinity))

Table 16

Dissolved inorganic nitrogen standards for coastal water (salinity 32), or part of such water, (coastal waters categorised by type in accordance with paragraph 3 of Schedule 2)				
Mean dissolved inorganic nitrogen concentration (micromoles per litre) during the period 1st November to 28th February				
	Dissolved inorganic nitrogen concentration (micromoles per litre)			
Type	*High*	*Good*	*Moderate*	*Poor*
	Mean for the period 1st Nov to 28th Feb			
Clear	12[(i)]	18[(i)]	27 [(i)]	40.5[(i)]
		99 percentile standard for the period 1st Nov – 28th Feb		
Intermediate turbidity	12	70	105	157.5
Turbid	12	180	270	405
Very turbid	12	270	405	607.5

[(i)] The standard refers to the concentration of dissolved inorganic nitrogen at a mean salinity of 32 for the period of 1st November to 28th February.

Table 17

Dissolved inorganic nitrogen standards for transitional water (salinity 25), or part of such water, (transitional waters categorised by type in accordance with paragraph 3 of Schedule 2)				
Mean dissolved inorganic nitrogen concentration (micromoles per litre) during the period 1st November to 28th February				
	Dissolved inorganic nitrogen concentration (micromoles per litre)			
Type	*High*	*Good*	*Moderate*	*Poor*
	Mean for the period 1st Nov to 28th Feb			
Clear	20(i)	30(i)	45(i)	67.5(i)
		99 percentile standard for the period 1st Nov to 28th Feb		
Intermediate turbidity	20	70	105	157.5
Turbid	20	180	270	405
Very turbid	20	270	405	607.5

(i) The standard refers to the concentration of dissolved inorganic nitrogen at a mean salinity of 25 for the period of 1st November 28th February.

PART 2

Specific pollutants

1. The Appropriate Agency must apply the standards for specific pollutants set out in Table 1.

Table 1

Standards(i) for specific pollutants				
Substance	*Dissolved concentration (µg/l)*			
	Fresh water		*Salt water*	
	Column 1	*Column 2*	*Column 3*	*Column 4*
	Long term (Mean)	*Short term (95 percentile)*	*Long term (Mean)*	*Short term (95 percentile)*
Unionised ammonia (as nitrogen)			21	
Arsenic(ii)	50		25	
Benzyl butyl phthalate(iii)	7.5	51	0.75	10
Carbendazim	0.15	0.7		
Chlorine(iv)(v)	2	5		10
Chlorothalonil	0.035	1.2		
Chromium(III)(vi)	4.7	32		
Chromium(VI)(vii)	3.4		0.6	32
Copper (viii), (ix), (x)	1µg/l bioavailable		3.76 µg/l dissolved, where DOC ≤ 1mg/1 3.76 + (2.677 x ((DOC/2) – 0.5)) µg/l dissolved, where DOC > 1mg/l	

Cyanide[xi]	1	5	1	5
Cypermethrin[xii], [xiii]	0.0001	0.0004	0.0001	0.0004
Diazinon[xiv]	0.01	0.02	0.01	0.26
2, 4 Dichlorophenol	4.2	140	0.42	6
2, 4 Dichlorophenoxyacetic acid (2, 4 D[xv]	0.3	1.3	0.3	1.3
3, 4 Dichloroaniline	0.2	5.4	0.2	5.4
Dimethoate[xvi]	0.48	4.0	0.48	4.0
Glyphosate	196	398	196	398
Iron	1000		1000	
Linuron[xvii]	0.5	0.9	0.5	0.9
Manganese[xviii]	123 bioavailable			
Mecoprop[xix]	18	187	18	187
Methiocarb	0.01	0.77		
Pendimethalin	0.3	0.58		
Permethrin	0.001	0.01	0.0002	0.001
Phenol[xx]	7.7	46	7.7	46
Tetrachloroethane	140	1848		
Triclosan	0.1	0.28	0.1	0.28
Toluene	74	380	74	370
Zinc[xxi], [xxii]	10.9 bioavailable plus Ambient Background Concentration (µg/l) dissolved		6.8 dissolved plus Ambient Background Concentration (µg/l)	

[i] Standards are expressed as total concentrations in the whole water sample unless otherwise specified.
[ii] The standard for arsenic refers to the dissolved fraction of a water sample obtained by filtration through a 0.45µm filter or any equivalent pre-treatment.

[iii] The recommended salt water standard is derived using a safety factor of 100. Where the standard is failed, it is recommended that supporting evidence of ecological damage should be obtained before committing to expensive action.

[iv] The standards for chlorine specified in Column 2 and Column 4 must not be used for the purpose of classifying the ecological status or potential of bodies of surface water.

[v] The standard for chlorine specified in Column 4 is assessed on 95-percentile concentration (µg/l) of total residual oxidant; which refers to the sum of all oxidising agents existing in water, expressed as available chlorine.

[vi] The standard for chromium III specified in Column 2 must not be used for the purpose of classifying the ecological status or potential of bodies of surface water.

[vii] The standard for chromium VI specified in Column 4 must not be used for the purpose of classifying the ecological status or potential of bodies of surface water.

[viii] In this row, "bioavailable" means the fraction of the dissolved concentration of copper likely to result in toxic effects as determined using the UKTAG Metal Bioavailability Assessment Tool (also referred to as a PNEC Estimator) for copper.

[ix] "DOC" means the annual mean concentration of dissolved organic carbon in mg/l.

[x] The recommended salt water standard applies to the fraction of a water sample that passes through a 0.45-µm filter or that is obtained by any equivalent pre-treatment.

(xi) The standards for cyanide specified in Column 2 and Column 4 must not be used for the purpose of classifying the ecological status or potential of bodies of surface water.

(xii) Cypermethrin ceases to be a specific pollutant from 22nd December 2018, when it will be listed as a Priority Substance.

(xiii) The 95-percentile standards for cypermethrin specified in Column 2 and Column 4 must not be used for the purpose of classifying the ecological status or potential of bodies of surface water.

(xiv) The standards for diazinon specified in Column 2 and Column 4 must not be used for the purpose of classifying the ecological status or potential of bodies of surface water.

(xv) The standards for 2,4-D specified in Column 2 and Column 4 must not be used for the purpose of classifying the ecological status or potential of bodies of surface water.

(xvi) The standards for dimethoate specified in Column 2 and Column 4 must not be used for the purpose of classifying the ecological status or potential of bodies of surface water.

(xvii) The standards for linuron specified in Column 2 and Column 4 must not be used for the purpose of classifying the ecological status or potential of bodies of surface water.

(xviii) In this row, "bioavailable" means the fraction of the dissolved concentration of manganese likely to result in toxic effects as determined in accordance with the UKTAG Metal Bioavailability Assessment Tool (also referred to as a PNEC Estimator) for manganese.

(xix) The standards for mecoprop specified in Column 2 and Column 4 must not be used for the purpose of classifying the ecological status or potential of bodies of surface water.

(xx) The standards for phenol specified in Column 2 and Column 4 must not be used for the purpose of classifying the ecological status or potential of bodies of surface water.

(xxi) In this row, "bioavailable" means the fraction of the dissolved concentration of zinc likely to result in toxic effects as determined in accordance with the UKTAG Metal Bioavailability Assessment Tool for zinc.

(xxii) In respect of dissolved zinc, the Appropriate Agency must apply the Ambient Background Concentration for freshwaters in Table 2. For saltwater, an Ambient Background Concentration of 1.1 µg/l is recommended.

Table 2

Ambient Background Concentrations(i) for dissolved zinc in freshwaters in England and Wales (to be used in conjunction with Table 1)

Catchment/Group of catchments(ii)	*ABC (µg/l)*
Tyne	4.8
Tees	4.1
Ouse, Humber	2.9
Nene	4.0
Great Ouse	3.1
River Stour	3.0
Blackwater/Chelmer	3.6
Lee	3.3
Thames	2.0
Test	2.0
Avon/Hants	3.1
Exe	1.4
Dart	1.7
Clywd/Conwy	2.0
Dee	2.9
Eden	1.2

Anglesey	3.0
Tamar	2.9
Fal	5.8
Camel	7.1
Tone/Parrett	3.3
Frome, Bristol Avon	2.3
Wye	2.0
Usk	2.2
Taff	2.8
Neath	2.8
Loughar	3.9
Tywi	2.0
Teifi	2.5
Rheidol/Ystwyth	4.1
Dovey	3.2
Glaslyn	2.6
All other freshwaters not listed above	1.4

(i) Ambient Background Concentration is an estimate of background concentration based on a low percentile of monitoring data. Ambient Background Concentration ABC is the environmental concentration expected where no (or only minor) anthropogenic inputs are present.

(ii) Freshwater Ambient Background Concentrations in England and Wales are delineated by Hydrometric Area, details of which can be found on the website of the Centre for Ecology & Hydrology.

PART 3

Priority substances

The environmental quality standards

1.—(1) The Appropriate Agency must apply the environmental quality standards ("EQS") for the substances numbered 1 to 33 in Table 1 for bodies of surface water.

(2) Subject to paragraph 3—

(a) for all substances numbered 1 to 33 in Table 1, except for those referred to in sub-paragraph (b), the Appropriate Agency must apply the water EQS in accordance with columns 1 to 4 of that table;

(b) for the substances numbered 5, 15, 16, 17, 21, 28 in Table 1, the Appropriate Agency must apply the biota EQS in column 5 of that Table.

2.—(1) From 22nd December 2018, the Appropriate Agency must, in addition to applying the EQS in accordance with paragraph (1), also apply the EQS in Table 1 for substances numbered 34 to 45 in that Table in accordance with sub-paragraph (2).

(2) Subject to paragraph 3,—

(a) the Appropriate Agency must apply the biota EQS laid down in column 9 of that Table for the substances numbered 34, 35, 37, 43 and 44 in Table 1 to this Part;

(b) for all other substances numbered 34 to 45 in Table 1, the Appropriate Agency must apply the water EQS in accordance with Table 1.

3.—(1) In relation to one or more categories of surface water, the Appropriate Agency may apply an EQS for a matrix or, if applicable, a biota taxon other than that required to be applied by paragraphs 1 and 2, if the conditions in sub-paragraphs (2) and (4) are met.

(2) The first condition is that the Appropriate Agency, having regard to any guidance made under the Common Implementation Strategy for the Water Framework Directive, applies —

(a) the relevant EQS laid down in Table 1 for the alternative matrix or biota taxon for that substance; or

(b) where there is no relevant EQS in Table 1 for the alternative matrix or biota taxon, applies an appropriate EQS in accordance with sub-paragraph (3).

(3) An appropriate EQS for the purposes of sub-paragraph (2)(b) is one that offers at least the same level of protection as an EQS established for a matrix or biota taxon that is—

(a) in Table 1; and

(b) according to technical knowledge and expert judgment, is equivalent to the alternative matrix or biota taxon.

(4) The second condition is that—

(a) the Appropriate Agency's method of analysis for the chosen matrix or biota taxon fulfils the minimum performance criteria laid down in the Chemical Analysis of Water status (Technical Specifications) Directions 2011(**a**); or

(b) where those minimum performance criteria are not met for any matrix—

(i) the monitoring is carried out using the best available techniques not entailing excessive costs; and

(ii) the method of analysis performs at least as well as that available for the matrix specified in Table 1 for the relevant substance.

Monitoring

4. Where a potential risk to, or via, the aquatic environment from acute exposure to one of the substances listed in Table 1 has been identified as a result of measured or estimated environmental concentrations or emissions, and where a biota or alternative EQS is being applied, the Appropriate Agency must—

(a) also monitor surface waters; and

(b) where such EQS have been established, apply the MAC-EQS set out in Table 1.

5. Where, pursuant to direction 6 of the Chemical Analysis of Water Status (Technical Specifications) Directions 2011, the calculated mean value of a measurement, when carried out using the best available technique not entailing excessive costs, is referred to as "less than the limit of quantification", and the limit of quantification of that technique is above the EQS, the Appropriate Agency must not use the result for the substance for the purposes of assessing the overall chemical status of that water body.

6. For substances for which an EQS for sediment or biota (or both) is applied, the Appropriate Agency must, unless paragraph 7 applies, monitor the substance in the relevant matrix at least once every year, unless technical knowledge and expert judgement justify another interval.

7. Subject to paragraph 8, the Appropriate Agency may monitor the substances numbered 5, 21, 28, 30, 35, 37, 43 and 44 in Table 1 less intensively than is required for priority substances under paragraph 6 above and Annex V to the Water Framework Directive, provided that the monitoring is representative, and a statistically robust baseline is available regarding the presence of those substances in the aquatic environment.

8. Monitoring under paragraph 7 must take place at least every three years, unless technical knowledge and expert judgment justify another interval.

(**a**) Copies of the Directions are available from the Water Quality Division, Area 3D Nobel House, 17 Smith Square, London SW19 3JR. These documents are also available from the Welsh Government, Water Branch, Cathays Park, Cardiff, CF10 3NQ.

Priority substances tending to accumulate in sediment or biota

9. The Appropriate Agency must conduct a long-term trend analysis of concentrations of those priority substances listed in Table 1 that tend to accumulate in sediment or biota (or both), giving particular consideration to the substances numbered 2, 5, 6, 7, 12, 15, 16, 17, 18, 20, 21, 26, 28, 30, 34, 35, 36, 37, 43 and 44, on the basis of the monitoring of surface water status carried out in accordance with Article 8 of the Water Framework Directive.

10. The Appropriate Agency must take such measures as agreed with the Secretary of State or Welsh Ministers (as appropriate) in accordance with Article 4 of the Water Framework Directive, aimed at ensuring that such concentrations do not significantly increase in sediment and/or relevant biota.

11.—(1) The Appropriate Agency must carry out monitoring under paragraph 9 in sediment and/or biota so as to provide sufficient data for a reliable long-term trend analysis.

(2) This monitoring should take place every three years, unless the Appropriate Agency's technical knowledge and expert judgment justify another interval.

Applying the EQS: supplementary provision

12.—(1) For any given surface water body, the AA-EQS is the arithmetic mean of the concentrations measured at different times during the year for each representative monitoring point within the water body.

(2) The calculations and methods listed in sub-paragraph (3) must be in accordance with implementing acts adopting technical specifications for chemical monitoring and quality of analytical results, in accordance with the Water Framework Directive.

(3) The calculations and methods referred in sub-paragraph (2) are—

(a) the calculation of the arithmetic mean for an AA-EQS;

(b) the analytical method used for any EQS; and

(c) where there is no appropriate analytical method meeting the minimum performance criteria, the method of applying an EQS.

13. In order to calculate the MAC for a priority substance, the Appropriate Agency may, in accordance with Section 1.3.4 of Annex V to the Water Framework Directive, introduce statistical methods, such as a percentile calculation, to ensure an acceptable level of confidence and precision for determining compliance with the MAC-EQS.

14. Where the Appropriate Agency introduces statistical methods in accordance with paragraph 13, such methods must comply with rules set out in accordance with Community legislation.

15.—(1) Subject to sub-paragraph (2), the water EQS laid down in Table 1 are expressed as total concentrations in the whole water sample.

(2) In the case of cadmium, lead, mercury and nickel ("metals"), the water EQS refer to—

(a) the dissolved concentration, which is the dissolved phase of a water sample obtained by filtration through a 0.45 μm filter;

(b) any equivalent pre-treatment; or

(c) where specifically indicated, the bioavailable concentration.

16. The Appropriate Agency may, when assessing the monitoring results against the relevant EQS, take into account—

(i) natural background concentrations for metals and their compounds where such concentrations prevent compliance with the relevant EQS;

(ii) hardness, pH, dissolved organic carbon or other water quality parameters that affect the bioavailability of metals, the bioavailable concentrations being determined using appropriate bioavailability modelling.

Mixing zones

17.—(1) The Appropriate Agency may designate mixing zones adjacent to points of discharge in surface water bodies.

(2) In mixing zones designated under sub-paragraph (1), concentrations of one or more substances listed in Table 1 may exceed the relevant EQS if those concentrations do not affect the compliance of the rest of the water body with those standards.

(3) The Appropriate Agency may only designate such mixing zones if the extent of any such zone is in accordance with the Technical Guidelines for the Identification of Mixing Zones(**a**)—

(a) restricted to the proximity of the point of discharge having regard to any Commission guidance;

(b) proportionate, having regard to the concentrations of pollutants at the point of discharge and to the conditions on emissions of pollutants used to regulate such emissions, such as in the basic measures established under regulation 10 of the WFD Regulations and any relevant EU law, in accordance with the application of best available techniques and Article 10 of the Water Framework Directive.

Watch list

18.—(1) The Appropriate Agency must, within the deadlines set out in sub-paragraph (3), monitor each substance in the watch list produced by the Commission under Article 8b(2) of the EQS Directive.

(2) The monitoring referred to in sub-paragraph (1) must be carried out—

(a) at least once a year—

(i) in respect of the Natural Resource Body for Wales at a minimum of one monitoring station;

(ii) in respect of the Environment Agency at a minimum of fourteen monitoring stations; and

(b) having regard to any Commission guidance published for these purposes under Article 8b of the EQS Directive.

(3) The monitoring period must—

(a) for each substance included in the first watch list, commence on 20th October 2015; and

(b) for each substance included in updated lists, commence within six months of its inclusion in the list.

(4) In selecting the monitoring stations, the monitoring frequency and timing for each substance, the appropriate agency shall take into account the use patterns and possible occurrence of the substance.

19. The Appropriate Agency may opt not to undertake the monitoring under paragraph 18 for a particular substance if—

(a) that agency has sufficient, comparable, representative and recent monitoring data for the substance from existing monitoring programmes or studies; and

(b) the substance was monitored using a methodology that satisfies the requirements of the technical guidelines developed by the Commission in accordance with Article 8b(5) of the EQS Directive.

20.—(1) The Appropriate Agency must report the results of the monitoring carried out pursuant to paragraph 18 to the Commission in accordance with the following deadlines—

(a) for the first watch list, within 21 months of the establishment of the watch list; and every year thereafter while the substance is kept on the list.

(**a**) C(2010) 9369

(b) for each substance included in subsequent lists, within 21 months of the inclusion of the substance in the watch list, and every year thereafter while the substance is kept on the list.

(2) The reports referred to in sub-paragraph (1) must include information on the monitoring strategy and the representativeness of the monitoring stations.

Inventory of priority substances

21.—(1) The appropriate agency must, for each river basin district, maintain an inventory of emissions, discharges and losses of all priority substances and pollutants listed in Table 1, including their concentrations in sediment and biota, as appropriate.

(2) The inventory maintained under paragraph (1) must—

(a) be maintained on the basis of the information collected in accordance with Articles 5 and 8 of the Water Framework Directive, Regulation (EC) No 166/2006(**a**), and other available data; and

(b) include maps, if available, of those emissions, discharges and losses.

(3) The reference period for the estimation of pollutant values to be entered in the inventories maintained under paragraph (1) is—

(a) a 12-month period between the 1st January 2008 and 31st December 2010; or

(b) for priority substances or pollutants covered by Directive 91/414/EEC(**b**), concerning the placing of plant protection products on the market, a 12-month period between 1st January 2008 and 31st December 2010, or the average of the years 2008, 2009 and 2010.

(4) The reference period for the establishment of values in the updated inventories under paragraph (5) is—

(a) the year before that analysis is to be completed; or

(b) for priority substances or pollutants covered by Directive 91/414/EEC, the year before that analysis is to be completed or the average values from the three years before the analysis is to be completed.

(5) The appropriate authority must ensure that the inventories are updated as part of the reviews of the analyses required by regulations 5(2) and 6(2) of the WFD Regulations.

(**a**) OJ No L 33, 4.2.2006, p1. Article 8 was last amended by Regulation (EC) No 596/2009 (OJ No L 188, 18.7.2007, p 14).
(**b**) OJ No L 230, 19.8.1991, p 1, as last amended by Commission Implementation Directive 2011/60/EU (OJ No L 136, 24.5 2011, p 58).

Table 1: Environmental quality standards for priority substances and other pollutants used to clarify chemical status								
No	*Name of substance*	*CAS number(1)*	*Date*	*AA-EQS(2) Inland surface waters (4) (µg/l)*	*AA-EQS(2) Other surface waters (µg/l)*	*MAC-EQS(3) Inland surface waters(4) (µg/l)*	*MAC-EQS(3) Other surface waters (µg/l)*	*EQS Biota(5) (µg/kg)*
				Column 1	Column 2	Column 3	Column 4	Column 5
1	Alachlor	15972-60-8		0.3	0.3	0.7	0.7	
2	Anthracene	120-12-7		0.1	0.1	0.1	0.1	
3	Atrazine	1912-24-9		0.6	0.6	2.0	2.0	
4	Benzene	71-43-2		10	8	50	50	
5	Brominated diphenylethers(6)	32534-81-9				0.14	0.014	0.0085
6	Cadmium and its compounds(7) (depending on water hardness classes)	7440-43-9		≤ 0.08 (Class 1) 0.08 (Class 2) 0.09 (Class 3) 0.15 (Class 4) 0,25 (Class 5)	0.2	≤ 0.45 (Class 1) 0.45 (Class 2) 0.6 (Class 3) 0.9 (Class 4) 1,5 (Class 5)		
6a	Carbon-tetrachloride(8)	56-23-5		12	12	not applicable	not applicable	
7	C10-13 Chloroalkanes(9)	85535-84-8		0.4	0.4	1.4	1.4	
8	Chlorfenvinphos	470-90-6		0.1	0.1	0.3	0.3	
9	Chlorpyrifos (Chlorpyrifosethyl)	2921-88-2		0.03	0.03	0.1	0.1	
9a	Cyclodiene pesticides: Aldrin(8) Dieldrin(8) Endrin(8) Isodrin(8)	309-00-2 60-57-1 72-20-8 465-73-6		Σ = 0.01	Σ = 0.005	not applicable	not applicable	
9b	DDT total(8), (10)	not applicable		0.025	0.025	not applicable	not applicable	
	para-para-DDT(8)	50-29-3		0.01	0.01	not applicable	not applicable	
10	1.2-Dichloroethane	107-06-2		10	10	not applicable	not applicable	

11	Dichloromethane	75-09-2		20	20	not applicable	not applicable	
12	Di(2-ethylhexyl)-phthalate (DEHP)	117-81-7		1.3	1.3	not applicable	not applicable	
13	Diuron	330-54-1		0.2	0.2	1.8	1.8	
14	Endosulfan	115-29-7		0.005	0.0005	0.01	0.004	
15	Fluoranthene	206-44-0		0.0063	0.0063	0.12	0.12	30
16	Hexachloro-benzene	118-74-1				0.05	0.05	10
17	Hexachloro-butadiene	87-68-3				0.6	0.6	55
18	Hexachloro-cyclohexane	608-73-1		0.02	0.002	0.04	0.02	
19	Isoproturon	34123-59-6		0.3	0.3	1.0	1.0	
20	Lead and its compounds	7439-92-1		$1.2^{(11)}$	1.3	14	14	
21	Mercury and its compounds	7439-97-6				0.07	0.07	20
22	Naphthalene	91-20-3		2	2	130	130	
23	Nickel and its compounds	7440-02-0		$4^{(11)}$	8.6	34	34	
24	Nonylphenols. (4-Nonylphenol)	84852-15-3		0.3	0.3	2.0	2.0	
25	Octylphenols ((4-(1,1′, 3,3′-tetramethylbutyl) -phenol))	140-66-9		0.1	0.01	not applicable	not applicable	
26	Pentachloro-benzene	608-93-5		0.007	0.0007	not applicable	not applicable	
27	Pentachloro-phenol	87-86-5		0.4	0.4	1	1	
28	Polyaromatic hydrocarbons (PAH)	Not applicable		not applicable	not applicable	not applicable	not applicable	
	Benzo(a)pyrene	50-32-8		1.7×10^{-4}	1.7×10^{-4}	0.27	0.027	5

	Benzo(b)fluoranthene	205-99-2		see footnote 12	see footnote 12	0.017	0.017	see footnote 12
	Benzo(k)fluoranthene	207-08-9		see footnote 12	see footnote 12	0.017	0.017	see footnote 12
	Benzo(g,h,i)-perylene	191-24-2		see footnote 12	see footnote 12	8.2×10^{-3}	8.2×10^{-4}	see footnote 12
	Indeno(1,2,3-cd)-pyrene	193-39-5		see footnote 12	see footnote 12	not applicable	not applicable	see footnote 12
29	Simazine	122-34-9		1	1	4	4	
29a	Tetrachloroethylene(8)	127-18-4		10	10	not applicable	not applicable	
29b	Trichloroethylene(8)	79-01-6		10	10	not applicable	not applicable	
30	Tributyltin compounds (Tributyltin-cation)	36643-28-4		0.0002	0.0002	0.0015	0.0015	
31	Trichlorobenzenes	12002-48-1		0.4	0.4	not applicable	not applicable	
32	Trichloromethane	67-66-3		2.5	2.5	not applicable	not applicable	
33	Trifluralin	1582-09-8		0.03	0.03	not applicable	not applicable	
34	Dicofol	115-32-2	22/12/18 onwards	1.3×10^{-3}	3.2×10^{-5}	not applicable(13)	not applicable(13)	33
35	Perfluorooctane sulfonic acid and its derivatives (PFOS)	1763-23-1	22/12/18 onwards	6.5×10^{-4}	1.3×10^{-4}	36	7.2	9.1
36	Quinoxyfen	124495-18-7	22/12/18 onwards	0.15	0.015	2.7	0.54	
37	Dioxins and dioxin-like compounds	See footnote 9 in Annex X to Directive 2000/60/EC	22/12/18 onwards			not applicable	not applicable	Sum of PCDD+PCDF+ PCB-DL 0.0065 µg.kg^{-1} TEQ(14)
38.	Aclonifen	74070-46-5	22/12/18 onwards	0.12	0.012	0.12	0.012	
39	Bifenox	42576-02-3	22/12/18	0.012	0.0012	0.04	0.004	

			onwards					
40	Cybutryne	28159-98-0	22/12/18 onwards	0.0025	0.0025	0.016	0.016	
41	Cypermethrin	52315-07-8	22/12/18 onwards	8×10^{-5}	8×10^{-6}	6×10^{-4}	6×10^{-5}	
42	Dichlorvos	62-73-7	22/12/18 onwards	6×10^{-4}	6×10^{-5}	7×10^{-4}	7×10^{-5}	
43	Hexabromocyclododecane (HBCDD)	See footnote 11 in Annex X to Directive 2000/60/EC	22/12/18 onwards	0.0016	0.0008	0.5	0.05	167
44	Heptachlor and heptachlor epoxide	76-44-8/1024-57-3	22/12/18 onwards	2×10^{-7}	1×10^{-8}	3×10^{-4}	3×10^{-5}	6.7×10^{-3}
	Terbutryn	886-50-0	22/12/18 onwards	0.065	0.0065	0.34	0.034	

(1) CAS: Chemical Abstracts Service.

(2) This parameter is the EQS expressed as an annual average value (AA-EQS). Unless otherwise specified, it applies to the total concentration of all isomers.

(3) This parameter is the EQS expressed as a maximum allowable concentration (MAC-EQS). Where the MAC-EQS are marked as "not applicable", the AA-EQS values are considered protective against short-term pollution peaks in continuous discharges since they are significantly lower than the values derived on the basis of acute toxicity.

(4) Inland surface waters encompass rivers and lakes and related artificial or heavily modified water bodies.

(5) Unless otherwise indicated, the biota EQS relate to fish. An alternative biota taxon, or another matrix, may be monitored instead, as long as the EQS applied provides an equivalent level of protection. For substances numbered 15 (fluoranthene) and 28 (PAHs), the biota EQS refers to crustaceans and molluscs. For the purpose of assessing chemical status, monitoring of fluoranthene and PAHs in fish is not appropriate. For substance number 37 (dioxins and dioxin-like compounds), the biota EQS relates to fish, crustaceans and molluscs, in line with section 5.3 of the Annex to Commission Regulation (EU) No 1259/2011 of 2 December 2011 amending Regulation (EC) No 1881/2006 as regards maximum levels for dioxins, dioxin-like PCBs and non-dioxin-like PCBs in foodstuffs (OJ L 320, 3.12.2011, p. 18).

(6) For the group of priority substances covered by brominated diphenylethers (No 5), the EQS refers to the sum of the concentrations of congener numbers 28, 47, 99, 100, 153 and 154.

(7) For cadmium and its compounds (No 6) the EQS values vary depending on the hardness of the water as specified in five class categories (Class 1: < 40 mg CaCO3/l, Class 2: 40 to < 50 mg CaCO3/l, Class 3: 50 to < 100 mg CaCO3/l, Class 4: 100 to < 200 mg CaCO3/l and Class 5: ≥ 200 mg CaCO3/l).

(8) This substance is not a priority substance but one of the other pollutants for which the EQS are identical to those laid down in the legislation that applied prior to 13 January 2009.

(9) No indicative parameter is provided for this group of substances. The indicative parameter(s) must be defined through the analytical method.

(10) DDT total comprises the sum of the isomers 1,1,1-trichloro-2,2 bis (p-chlorophenyl) ethane (CAS number 50-29-3; EU number 200-024-3); 1,1,1-trichloro-2 (o-chlorophenyl)-2-(p-chlorophenyl) ethane (CAS number 789-02-6; EU Number 212-332-5); 1,1-dichloro-2,2 bis (p-chlorophenyl) ethylene (CAS number 72-55-9; EU Number 200-784-6); and 1,1-dichloro-2,2 bis (p-chlorophenyl) ethane (CAS number 72-54-8; EU Number 200-783-0).

(11) These EQS refer to bioavailable concentrations of the substances.

(12) For the group of priority substances of polyaromatic hydrocarbons (PAH) (No 28), the biota EQS and corresponding AA-EQS in water refer to the concentration of benzo(a)pyrene, on the toxicity of which they are based. Benzo(a)pyrene can be considered as a marker for the other PAHs, hence only benzo(a)pyrene must be monitored for comparison with the biota EQS or the corresponding AA-EQS in water.

(13) There is insufficient information available to set a MAC-EQS for these substances.

(14) PCDD: polychlorinated dibenzo-p-dioxins; PCDF: polychlorinated dibenzofurans; PCB-DL: dioxin-like polychlorinated biphenyls; TEQ: toxic equivalents according to the World Health Organisation 2005 Toxic Equivalence Factors.

PART 4

Biological element status boundary values

SECTION 1

Rivers

1.—(1) In relation to a river, or part of a river, the Appropriate Agency must apply the high, good, moderate or poor boundary values—

(a) in relation to the phytobenthos boundary values, by calculating the ecological quality ratio for phtyobenthos in accordance with the method —"River DARLEQ2" ISBN 978-1-906934-58-3 in accordance with Table 1;

(b) in relation to the aquatic macrophyte boundary values, by calculating the ecological quality ratio in accordance with the method, "River LEAFPACS 2" ISBN 978-1-906934-44-6 in accordance with Table 2;

(c) in relation to the benthic invertebrate fauna boundary values, by calculating the ecological quality ratio in accordance with the method, "Invertebrates (General Degradation): Walley, Hawkes, Paisley & Trigg (WHPT)" metric in River Invertebrate Classification Tool (RICT) ISBN 978-1-906934-62-0 in accordance with Tables 3 and 4;

(d) in relation to fish fauna boundary values, by calculating the ecological quality ratio in accordance with the method "Fish Fauna Fisheries Classification Scheme (FCS2)" ISBN 978-1-906934-09-5 in accordance with Table 5.

(2) In relation to a river or part of a river, the Natural Resources Body for Wales must apply the high, good, moderate or poor boundary values in relation to the benthic invertebrate fauna boundary values, by calculating the ecological quality ratio in accordance with the method, "UKTAG River Assessment Method Benthic Invertebrate Fauna, Invertebrates (Anthropogenic acidification): WFD Acid Water Indicator Community (WFD-AWIC)" ISBN: 978-1-906934-48-4 in accordance with Table 6.

Table 1

Macrophytes and phytobenthos - phytobenthos boundary values for rivers	
UKTAG River Assessment Method: Macrophytes and Phytobenthos, Phytobenthos – Diatoms for assessing river and lake ecological quality (River DARLEQ 2) ISBN 978-1- 906934-58-3	
	Ecological quality ratio
High	1.00
Good	0.75
Moderate	0.50
Poor	0.25

Table 2

Macrophytes and phytobenthos - aquatic macrophyte boundary values for rivers	
UKTAG River Assessment Method: Macrophytes and Phytobenthos - Macrophytes (River LEAFPACS 2) ISBN978-1-906934-44-6	
	Ecological quality ratio
High	0.80
Good	0.60
Moderate	0.40
Poor	0.20

Table 3

Benthic invertebrate fauna boundary values for rivers (Number of TAXA)	
UKTAG River Assessment Method Benthic Invertebrate Fauna, Invertebrates (General Degradation): Walley, Hawkes, Paisley & Trigg (WHPT) metric in River Invertebrate Classification (RICT) ISBN: 978-1-906934-62-0 Tool (RICT) ISBN 978-1-906934-07-1	
	Ecological quality ratio
High	0.80
Good	0.68
Moderate	0.56
Poor	0.47

Table 4

Benthic invertebrate fauna boundary values for rivers (Average Score Per Taxon)	
UKTAG River Assessment Method Benthic Invertebrate Fauna, Invertebrates (General Degradation): Walley, Hawkes, Paisley & Trigg (WHPT) metric in River Invertebrate Classification (RICT) ISBN: 978-1-906934-62-10	
	Ecological quality ratio
High	0.97
Good	0.86
Moderate	0.72
Poor	0.59

Table 5

Fish boundary values for rivers	
UKTAG River Assessment Methods: Fish Fauna Fisheries Classification Scheme 2 (FCS2) ISBN 978-1-906934-09-5	
High	0.700
Good	0.400
Moderate	0.200
Poor	0.125

Table 6

Benthic invertebrate fauna boundary values for rivers (Acid Water Indicator Community)		
UKTAG River Assessment Method Benthic Invertebrate Fauna, Invertebrates (Anthropogenic acidification): WFD Acid Water Indicator Community (WFD-AWIC) ISBN: 978-1-906934-48-4		
Column 1	*Column 2*	*Column 3*
	UK Humic	*England and Wales Clear*

High	0.93	1.00
Good	0.83	0.89
Moderate	0.77	0.78
Poor	0.73	0.67

SECTION 2

Freshwater and brackish lakes

2. In relation to a lake, or part of a lake, the Appropriate Agency must apply

(a) the high, good, moderate or poor boundary values—

(i) in relation to phytoplankton, by calculating the ecological quality ratio for phytoplankton in accordance with the Phytoplankton Lake Assessment Tool with Uncertainty Module (PLUTO) ISBN: 978-1-906934-47-7, in accordance with Table 7;

(ii) in relation to phytobenthos, by calculating the ecological quality ratio for phytobenthos in accordance with Phytobenthos boundary values for lakes for application with the method, Phytobenthos- Diatoms for Assessing River and Lake ecological Quality (Lake DARLEQ2 ISBN: 978-1-906934-59-0, in accordance with Table 8;

(iii) in relation to macrophytes, by calculating the ecological quality ratio for macrophytes in accordance with UKTAG Lake Assessment method: Macrophytes and Phytobenthos, Macrophytes (Lake LEAFPACS2) ISBN: 978-1906934-45-3 in accordance with Table 9;

(iv) in relation to benthic invertebrate fauna, by calculating the ecological quality ratio for benthic invertebrate fauna in accordance with the UKTAG lake assessment methods: Benthic Invertebrate fauna Chironomid Pupal Exuviae Technique (CPET) ISBN: 978-1906934-04-0, in accordance with Table 10.

(b) the high, good or moderate boundary values in relation to benthic invertebrate fauna, by calculating the ecological quality ratio for benthic invertebrate fauna in accordance with the UKTAG Lake assessment methods: Benthic Invertebrate fauna: Lake Acidification Macroinvertebrate Metric (LAMM) ISBN: 978-1-906934-05-7, in accordance with Table 11.

Table 7

Phytoplankton standards for lakes	
For application with the method, Phytoplankton Lake Assessment Tool with Uncertainty Module (PLUTO) ISBN: 978-1-906934-47-7	
Condition of the quality elements	*Mean ecological quality ratio PLUTO*
High	0.80
Good	0.60
Moderate	0.40
Poor	0.20

Table 8

Phytobenthos standards for lakes			
For application with the method, Phytobenthos- Diatoms for Assessing River and Lake ecological Quality (Lake DARLEQ2) ISBN: 978-1-906934-59-0			
	Mean ecological quality ratio$_{DARLEQ2}$		
Condition of Quality Element	*Lake Geological Category: "high alkalinity"*	*Lake Geological Category: "moderate alkalinity"*	*Lake Geological Category: "low alkalinity"*
High	0.92	0.93	0.92
Good	0.70	0.66	0.70
Moderate	0.46	0.46	0.46
Poor	0.23	0.23	0.23

Table 9

Macrophyte standards for lakes	
For application with the method: UKTAG Lake Assessment Method: Macrophytes and Phytobenthos, Macrophytes (Lake LEAFPACS2) ISBN: 978-1906934-45-3	
Condition of the Quality Element	*Ecological Quality ratio*
High	0.80
Good	0.60
Moderate	0.40
Poor	0.20

Table 10

Benthic Invertebrate fauna standards for lakes (CPET)	
For application with the assessment method, UKTAG Lake Assessment methods: Benthic Invertebrate Fauna, Chironomid Pupal Exuviae Tecnique (CPET) ISBN:978-1906934-04-0	
Condition of the Quality Element	*Ecological quality ratioCPET*
High	0.77
Good	0.64
Moderate	0.49
Poor	0.36

Table 11

Benthic Invertebrate fauna standards for lakes (LAMM)		
For application with the assessment method, UKTAG Lake Assessment Methods: Benthic Invertebrate Fauna: Acidification Macroinvertebrate Metric (LAMM) ISBN: 978-1-906934-05-7		
	Mean ecological quality ratio$_{LAMM}$	
Condition of the Quality Element	*Low alkalinity with ≥ 5 mg/l dissolved organic carbon (DOC) – Humic lakes*	*Low alkalinity with < 5mg dissolved organic carbon (DOC) –Clear lakes*
High	0.83	0.86
Good	0.61	0.70
Moderate	-	0.54

SECTION 3

Transitional and coastal water bodies

3.—(1) The Appropriate Agency must apply—

(a) in relation to coastal water bodies, the high or good, boundary values in relation to Tributyltin (TBT) in accordance with the UKTAG Coastal Water Assessment Method, Benthic Invertebrate Fauna, Assessment of imposex in Nucella lapillus (dog whelks); ISBN: 978-1-906934-35-4, in accordance with Table 12;

(b) in relation to transitional and coastal water bodies, the benthic invertebrate fauna high, good, moderate or poor boundary values, in accordance with UKTAG Transitional and Coastal Water Assessment Methods, Benthic Invertebrate Fauna, Infaunal Quality Index; ISBN: 978-1-906934-34-7, in accordance with Table 13;

(c) in relation to transitional water bodies, the fish fauna high, good, moderate or poor boundary values, in accordance with the UKTAG Transitional Water Assessment Method, Fish Fauna, Transitional Fish Classification Index; ISBN: 978-1-906934-32-3, in accordance with Table 14.

(d) in relation to transitional and coastal water bodies, the angiosperm (seagrass) high, good, moderate or poor boundary values, in accordance with the UKTAG Transitional and Coastal Water Assessment Method, Angiosperms, Intertidal Seagrass Tool; ISBN: 978-1-906934-36-1, in accordance with Table 15.

(e) in relation to transitional and coastal water bodies, the angiosperm (saltmarsh) high, good, moderate or poor boundary values, in accordance with the UKTAG Transitional and Coastal Water Assessment Method, Angiosperms, Saltmarsh Tool; ISBN:978-1-906934-40-8, in accordance with Table 16.

(f) in relation to transitional water bodies, the phytoplankton high, good, moderate or poor boundary values, in accordance with the UKTAG Transitional Water Assessment Method, Phytoplankton, Transitional Water Phytoplankton Tool; ISBN: 978-1-906934-41-5, in accordance with Table 17.

(g) in relation to coastal water bodies, the phytoplankton high, good, moderate or poor boundary values, in accordance with the UKTAG Coastal Water Assessment Method, Phytoplankton, Coastal Water Phytoplankton Tool; ISBN: 978-1-906934-33-0, in accordance with Table 18.

(h) in relation to transitional and coastal water bodies, the macroalgal (opportunistic macroalgal) high, good, moderate or poor boundary values, in accordance with the UKTAG Transitional and Coastal Water Assessment Method, Macroalgae, Opportunistic Macroalgal Blooming Tool; ISBN: 978-1-906934-37-8, in accordance with Table 19.

(i) in relation to coastal water bodies the macroalgal (rocky shore macroalgae) high, good, moderate or poor boundary values, in accordance with the UKTAG Coastal Water Assessment Method, Macroalgae, Intertidal Rocky Shore Macroalgal Index; ISBN: 978-1-906934-39-2, in accordance with Table 20.

(2) In relation to transitional water bodies, the Environment Agency must apply the macroalgae (fucoid extent) high, good, moderate or poor boundary values, in accordance with the UKTAG Transitional Water Assessment Method, Macroalgae, Fucoid Extent Tool; ISBN: 978-1-906934-38-5, in accordance with Table 21.

Table 12

Benthic invertebrate fauna boundary values for coastal water bodies - Imposex	
UKTAG (2014) UKTAG Coastal Water Assessment Method, Benthic Invertebrate Fauna, Assessment of imposex in Nucella lapillus (dog whelks); ISBN: 978-1-906934-35-4.	
	Ecological Quality Ratio$_{imposex}$
High	0.95
Good	0.34

Table 13

Benthic invertebrate fauna boundary values for transitional and coastal water bodies – Infaunal Quality Index	
UKTAG (2014) UKTAG Transitional and Coastal Water Assessment Methods, Benthic invertebrate fauna, Infaunal Quality Index; ISBN:978-1-906934-34-7.	
	Ecological quality ratio$_{IQI}$
High	0.75
Good	0.64
Moderate	0.44
Poor	0.24

Table 14

Fish boundary values for transitional water bodies	
UKTAG (2014) Transitional Water Assessment Method, Fish Fauna, Transitional Fish Classification Index; ISBN: 978-1-906934-32-3.	
	Ecological quality ratio
High	0.81
Good	0.58
Moderate	0.40
Poor	0.20

Table 15

Aquatic angiosperm boundary values for transitional and coastal water bodies - Seagrass	
UKTAG (2014) Transitional and Coastal Water Assessment Method, Angiosperms, Intertidal Seagrass Tool; ISBN: 978-1-906934-36-1	
	Ecological quality ratio$_{seagrass}$
High	0.80
Good	0.60
Moderate	0.40
Poor	0.20

Table 16

Aquatic angiosperm boundary values for transitional and coastal water bodies - Saltmarsh	
UKTAG (2014) Transitional and Coastal Water Assessment Method, Angiosperms, Saltmarsh Tool; ISBN:978-1-906934-40-8	
	Ecological quality ratio$_{saltmarsh}$
High	0.80
Good	0.60
Moderate	0.40
Poor	0.20

Table 17

Phytoplankton boundary values for transitional water bodies	
UKTAG (2014) UKTAG Transitional Water Assessment Method, Phytoplankton, Transitional Water Phytoplankton Tool; ISBN: 978-1-906934-41-5.	
	Ecological quality ratio$_{TWPT}$
High	0.80
Good	0.60
Moderate	0.40
Poor	0.20

Table 18

Phytoplankton boundary values for coastal water bodies	
UKTAG (2014) UKTAG Coastal Water Assessment Method, Phytoplankton, Coastal Water Phytoplankton Tool; ISBN: 978-1-906934-33-0	
	Ecological quality ratio$_{CWPT}$
High	0.80
Good	0.60
Moderate	0.40
Poor	0.20

Table 19

Aquatic macroalgae boundary values for transitional and coastal water bodies – opportunistic macroalgae	
UKTAG (2014) UKTAG Transitional and Coastal Water Assessment Method, Macroalgae, Opportunistic Macroalgal: Blooming Tool; ISBN: 978-1-906934-37-8.	
	Ecological quality ratio$_{OMBT}$
High	0.80
Good	0.60
Moderate	0.40
Poor	0.20

Table 20

Macroalgae boundary values for transitional and coastal water bodies – rocky shore macroalgae	
UKTAG (2014) UKTAG Coastal Water Assessment Method, Macroalgae, Macroalgae - Intertidal Rocky Shore Macroalgal Index; ISBN: 978-1-906934-39-2.	
	Ecological quality ratio$_{RSM}$
High	0.80
Good	0.60
Moderate	0.40
Poor	0.20

Table 21

Macroalgae boundary values for transitional water bodies - fucoids	
UKTAG (2014) UKTAG Transitional Water Assessment Method, Macroalgae, Fucoid Extent Tool; ISBN: 978-1-906934-38-5.	
	Ecological quality ratio$_{Fucoid}$
High	0.80
Good	0.60
Moderate	0.40
Poor	0.20

SCHEDULE 4

Article 3(d)

Classification of status of groundwater bodies

PART 1

Classifying the chemical status of groundwater

1.—(1) The Appropriate Agency must assess chemical status of a body of groundwater—

(a) by determining whether or not one or more of the indicators set out in Column 1 of Table 1 are applicable to the body of groundwater; and

(b) if any of those indicators are applicable, by carrying out appropriate investigations to determine whether or not the criteria in Column 2 of Table 1 corresponding to the applicable indicator, or indicators, for poor groundwater chemical status are satisfied.

2. The Appropriate Agency must classify a body of groundwater as being of good groundwater chemical status where—

(a) none of the indicators set out in column 1 of Table 1 is applicable; or

(b) one or more of those indicators is applicable but none of the corresponding criteria for poor groundwater chemical status set out in column 2 of Table 1 is satisfied.

3. In any case where paragraph 2 does not apply, the Appropriate Agency must classify the body of groundwater as being of poor groundwater chemical status.

Table 1

Risk indicators and classification criteria for groundwater chemical status	
Column 1	*Column 2*
Indicators of a risk that the chemical status of a body of groundwater is poor	*Criteria for poor groundwater chemical status*
(a) Failure of a threshold value in Schedule 5 to these Directions indicative of saline intrusion; or (b) indications of other intrusions of pollutants into the body of groundwater.	(i) Significant and sustained upward trend in electrical conductivity indicating saline intrusion; (ii) significant and sustained upward trend in the concentration of indicators of intrusions of other pollutants; or (iii) evidence that intrusions of pollutants have rendered abstractions unsuitable for use without purification treatment.
The groundwater body fails a threshold value in Schedule 5 to these Directions which is indicative of a risk to the ecological or chemical quality of an associated surface water body.	An associated surface water body fails a standard for good status and the concentration of the pollutant in the surface body resulting solely from inputs from the groundwater body represents ≥ 50 % of the relevant surface water standard.
(a) A wetland identified as directly dependent on the body of groundwater is significantly damaged; (b) the characteristics of the damage are such that it may be due to pollutants reaching the wetland via groundwater; and (c) a threshold value in Schedule 5 to these Directions which is indicative of risks to the ecological quality of the wetland type concerned has been exceeded.	Evidence in the form of sufficient hydrogeological and ecological monitoring data of significant damage to a wetland caused by pollution; and the pollutants responsible for that damage are judged to have reached the wetland via groundwater.
(a) The groundwater body being assessed fails a threshold value for groundwater in Schedule 5 to these Directions which is indicative of a risk of deterioration in the quality of water being abstracted, or intended to be abstracted, for human consumption; or (b) there are other indications of deterioration in the quality of water.	Deterioration in the quality of water within a drinking water protected area that could lead to an increase in purification treatment.
The groundwater body being assessed fails a threshold value in Schedule 5 to these Directions indicating that there is a significant impairment of human uses of that groundwater body.	(i) The average of the monitoring results from all the monitoring points representative of the risk to the quality of the groundwater exceeds the threshold value in Schedule 5 to these Directions; and (ii) the concentration of the pollutant to which the standard applies exceeds the maximum concentration allowed in drinking water in at least one sample from an appropriately representative monitoring point.

PART 2

Classifying the quantitative status of groundwater

1. The Appropriate Agency must classify the quantitative status of a groundwater body—

(a) by determining whether or not one or more of the indicators in Column 1 of Table 2 are applicable to the body of groundwater; and

(b) if any of those indicators are applicable, by carrying out appropriate investigations to determine whether or not the criteria in Column 2 of Table 2 corresponding to the applicable indicator or indicators for poor groundwater quantitative status are satisfied.

2. The body of groundwater must be classified as good groundwater quantitative status where—

(a) none of the indicators set out in column 1 of Table 2 are applicable, or

(b) one or more of those indicators is applicable but none of the corresponding criteria for poor groundwater quantitative status set out in column 2 of Table 2 is satisfied.

3. In any case where paragraph 2 does not apply, the Appropriate Agency must classify the body of groundwater as poor groundwater quantitative status.

Table 2

Risk Indicators and classification criteria for groundwater quantitative status	
Column 1	*Column 2*
Indicators of a risk that the quantitative status of a body of groundwater is poor	*Criteria for poor groundwater quantitative status*
(a) Failure of a threshold value in Schedule 5 to these Directions indicative of saline intrusion; or (b) indications of other intrusions of pollutants into the body of groundwater.	(i) Significant and sustained upward trend in electrical conductivity indicating saline intrusion; or (ii) significant and sustained upward trend in the concentration of indicators of other intrusions of pollutants; or (iii) evidence that intrusions of pollutants have rendered abstractions unsuitable for use without purification treatment.
Flow conditions in an associated surface water body are unsatisfactory and the Appropriate Agency suspects that the groundwater body being assessed may be a contributing factor.	Where 20% of the groundwater body being assessed has surface water bodies that are prevented from maintaining or achieving the target status class and the reduction in river flow in the surface body concerned resulting solely from groundwater abstraction represents ≥ 50% of the value of the applicable river flow standard.
There are indications of damage to a wetland resulting from insufficient water availability where the Appropriate Agency suspects that alterations to groundwater levels in the groundwater body being assessed are the major cause.	There is evidence of significant damage to a wetland caused by insufficient water availability and the Appropriate Agency is of the opinion that the major cause is quantitative pressures from groundwater abstraction or regional drainage pressures within the groundwater body.
There are indications that the quantity of groundwater being abstracted from the body of groundwater may exceed the long-term annual average rate of overall recharge and deplete the naturally available low flow resource.	Groundwater abstraction exceeds either the available resource within the groundwater body or the supported flows and there is evidence that the overall balance and groundwater level trends are not sustainable.

SCHEDULE 5

Article 3(d)

Threshold Values for Groundwater

1. Where any threshold value for groundwater in Table 1 below is failed, the Appropriate Agency must undertake an appropriate investigation in order to determine whether or not the applicable conditions for good groundwater chemical status are met in accordance with the procedure set out in Article 4 of the Groundwater Directive.

2. Threshold values may only be used as part of assessing the status of groundwater bodies and not as part of site specific investigations.

Table 1

Threshold Values for Groundwater								
Pollutant	*Mean concentration (or parameter value) in groundwater*							
	Saline Intrusion (Test 1)[1]	*Groundwater Impacts on:*				*GW Drinking water Protected Areas[2] (Test 4)[j]*	*General Quality of GW Body[2] (Test 5)*	*Units*
		Surface Water (Test 2)		*GWDTE (Test 3)*				
		Min TV	*Max TV*	*Min TV*	*Max TV*			
1,1,1-Trichloroethane		51.6	212					µg/l
1,1,2-Trichloroethane		206	848					µg/l
1,2-Dichloroethane		5.16	21.2					µg/l
Aldrin							0.0225	µg/l
Aluminium						150	150	µg/l
Ammonia (as N)		0.162	1.27			0.29	0.29	mg/l
Anthracene		0.052	0.193					µg/l
Arsenic		25.8	106			7.5	7.5	µg/l
Asulam							0.075	µg/l
Atrazine		0.309	1.27			0.075	0.075	µg/l
Bentazone		258	1060			0.075	0.075	µg/l
Benzene		5.16	21.2			0.75	0.75	µg/l
Benzo(a)pyrene		0.000089	0.000328			0.0075		µg/l
Benzo(b)fluoranthene		0.016	0.058			0.075		µg/l
Boron						750		µg/l
Bromate							0.0075	mg/l
Cadmium		0.054	0.53			3.75		µg/l
Chloride	NBC					188	188	mg/l
Chlormequat							0.075	µg/l
Chloroethene							0.375	µg/l
Chlortoluron						0.075	0.075	µg/l
Chromium		1.75	7.21			37.5		µg/l
Clopyralid						0.075	0.075	µg/l
Copper		0.516	2.12			1500	1500	µg/l
Cyanazine						0.075		µg/l
Cypermethrin		0.0000412	0.00017					µg/l
Diazinon		0.005	0.021					µg/l

Threshold Values for Groundwater								
Pollutant	*Mean concentration (or parameter value) in groundwater*							
	Saline Intrusion (Test 1)[1]	*Groundwater Impacts on:*				*GW Drinking water Protected Areas*[2] *(Test 4)*[j]	*General Quality of GW Body*[2] *(Test 5)*	*Units*
		Surface Water (Test 2)		*GWDTE (Test 3)*				
		Min TV	*Max TV*	*Min TV*	*Max TV*			
Dieldrin						0.025		µg/l
Diuron		0.103	0.424			0.075	0.075	µg/l
Electrical conductivity	NBC					1880		µS/cm
Fenuron						0.075	0.075	µg/l
Fluoranthene		0.0033	0.0122				0.075	µg/l
Fluoride						1.13		mg/l
Fluroxypyr						0.075		µg/l
Flutriafol							0.075	µg/l
Glyphosate		101	305				0.075	µg/l
Isoproturon		0.155	0.636			0.075	0.075	µg/l
Lead		0.619	2.54			7.5	7.5	µg/l
MCPA						0.075	0.075	µg/l
MCPB							0.075	µg/l
Mecoprop		9.28	38.2			0.075	0.075	µg/l
Mercury		0.026	0.106			0.75		µg/l
Metaldehyde							0.075	µg/l
Metazachlor						0.075		µg/l
Naphthalene		1.03	4.24				0.075	µg/l
Nickel		2.06	8.48			15	15	µg/l
Nitrate (as NO3)				4	26	37.5	37.5	mg/l
Phenol		4.08	14.9					µg/l
Phosphate (as P)		0.029	196					µg/l
Selenium						7.5		µg/l
Simazine		0.516	2.12			0.075	0.075	µg/l
Sodium						150		mg/l
Sulphate	NBC					188	188	mg/l
Tetrachloroethene		5.16	21.2			7.5	7.5	µg/l
Tetrachloromethane		6.19	25.4			2.25	2.25	µg/l
Toluene		38.2	157					µg/l
Trichloroethene		5.16	21.2			7.5	7.5	µg/l
Trichloromethane		1.29	5.3			75		µg/l
Trifluralin		0.015	0.064					µg/l
Xylene -o+p+m		15.5	63.6					µg/l
Zinc		5.62	23.1					µg/l

[1] For the Saline Intrusion Test (Test 1) the threshold values are set as the natural background concentration or parameter value (NBC) for the pollutants indicative of the intrusion, e.g. chloride, sulphate or electrical conductivity.

[2] These threshold values have been designed to be equivalent to a 95-percentile standard.

SCHEDULE 6

Article 2(1)

Specified lakes

Water body	*Name*	*RBD ID*	*Region*	*Country*
GB30538199	Pitsford Water	5	2	England
GB30538230	Ravensthorpe Reservoir	5	2	England
GB30538310	Grafham Water	5	2	England
GB30538633	Stow Cum Quy Fen	5	2	England
GB30538826	Felmersham Gravel Pits	5	2	England
GB30539264	Glemsford pits	5	2	England
GB30539450	Stewartby Lake	5	2	England
GB30640514	Blenheim Lakes	6	2	England
GB30641690	Welsh Harp	6	2	England
GB30539554	Brogborough Reservoir	5	2	England
GB30539601	Alton Water Reservoir	5	2	England
GB30539699	Foxcote Reservoir	5	2	England
GB30539944	Ardleigh Reservoir	5	2	England
GB30540418	Abberton Reservoir	5	2	England
GB30541427	Hanningfield Reservoir	5	2	England
GB30547009	Ormesby Broad	5	2	England
GB30547010	Rollesby Broad	5	2	England
GB30547011	Ormesby Little Broad	5	2	England
GB30547012	Filby Broad	5	2	England
GB30937631	Chelmarsh Reservoir	9	1	England
GB30937864	Stanford Reservoir	9	2	England
GB30937926	Coombe Pool	9	2	England
GB30937959	Trimpley Reservoir	9	1	England
GB30938214	Craig Goch Reservoir	9	1	Wales
GB30938240	Llyn Fyrddon Fawr	9	1	Wales
GB30938250	Draycote Water	9	2	England
GB30938282	Llyn Cerrigllwydion Isaf	9	1	Wales
GB30938356	Penygarreg Reservoir	9	1	Wales
GB30938419	Caban-coch Reservoir	9	1	Wales
GB30938427	Claerwen Reservoir	9	1	Wales
GB30938525	Llyn Gynon	9	1	Wales
GB30938586	Westwood Great Pool	9	2	England
GB30939891	Grwyne Fawr Reservoir	9	1	Wales
GB30939967	Usk Reservoir	9	1	Wales
GB30940067	Llangorse Lake	9	1	Wales
GB30940302	Cray Reservoir	9	1	Wales
GB30940365	Talybont Reservoir	9	1	Wales
GB30940411	Dowdeswell Reservoir	9	2	England
GB30940429	Upper Neuadd Reservoir	9	1	Wales
GB30940441	Beacons Reservoir	9	1	Wales
GB30940472	Lower Neuadd Reservoir	9	1	Wales
GB30940542	Cantref Reservoir	9	1	Wales
GB30547028	Syderstone Common	5	2	England
GB30639472	Grimsbury Reservoir	6	2	England
GB30640488	Cornbury Park Lakes	6	2	England
GB30641011	Farmoor Reservoir	6	2	England

GB30641193	Seventy Acres	6	2	England
GB30641198	North Metropolitan pit	6	2	England
GB30641274	Cheshunt Lake	6	2	England
GB30641313	Bowyers Water	6	2	England
GB30641523	King Georges Reservoir	6	2	England
GB30641559	Cotswold Water Park Lake 12	6	2	England
GB30641659	William Girling Reservoir	6	2	England
GB30641796	Bentley Priory	6	2	England
GB30641865	Lockwood Reservoir	6	2	England
GB30641884	High Maynard Reservoir	6	2	England
GB30641900	Low Maynard Reservoir	6	2	England
GB30641907	Broadwater Lake	6	2	England
GB30641922	Walthamstow Reservoir No 4	6	2	England
GB30641924	Walthamstow Reservoir No 1	6	2	England
GB30641939	Warwick Reservoir East	6	2	England
GB30641956	Warwick Reservoir West	6	2	England
GB30641975	Stoke Newington East Reservoir	6	2	England
GB30642155	Coate Water	6	2	England
GB30642334	The Queen Mother Reservoir	6	2	England
GB30642393	Sonning Eye gravel pit	6	2	England
GB30642407	Cliffe Pools North Lake	6	2	England
GB30642417	Wraysbury Reservoir	6	2	England
GB30642424	Cliffe Pools South Lake	6	2	England
GB30642430	Wraysbury Lake	6	2	England
GB30642488	King George VI Reservoir	6	2	England
GB30642489	Wraysbury No 2	6	2	England
GB30642490	Staines Reservoir North	6	2	England
GB30642525	Staines Reservoir South	6	2	England
GB30642538	Heron Lake	6	2	England
GB30642569	Queensmead	6	2	England
GB30642611	Farnham Flint or Englefield Lagoon	6	2	England
GB30642614	Kempton Park East Reservoir	6	2	England
GB30642622	Ameys Lake or Theale Lakes	6	2	England
GB30642639	Queen Mary Reservoir	6	2	England
GB30642691	Virginia Water	6	2	England
GB30642753	Thorpe Park Lakes	6	2	England
GB30642757	Englemere Pond	6	2	England
GB30642779	Bessborough Reservoir	6	2	England
GB30642791	Knight Reservoir	6	2	England
GB30642813	Queen Elizabeth 2 Storage Reservoir	6	2	England
GB30642841	Island Barn Reservoir	6	2	England
GB30642875	Swinley Park Pond	6	2	England
GB30642945	Heath Lake	6	2	England
GB30642956	Murston Lakes, angling lakes	6	2	England
GB30643001	Wasing Wood Ponds	6	2	England
GB30643054	Black Pond	6	2	England
GB30643117	Snodland Reservoir	6	2	England
GB30643125	Epsom Stew Pond	6	2	England
GB30643126	Milford Lake	6	2	England
GB30643218	Boldermere	6	2	England
GB30643315	Fleet Pond	6	2	England

GB30643339	Mytchett Lake	6	2	England
GB30643359	Whitmoor Common Pond	6	2	England
GB30643485	Bay Pond	6	2	England
GB30643602	Bough Beech Reservoir	6	2	England
GB30643758	The Tarn	6	2	England
GB30643943	Frensham Little Pond	6	2	England
GB30644023	Hedgecourt Lake	6	2	England
GB30644031	Frensham Great Pond	6	2	England
GB30644310	Weir Wood Reservoir	6	2	England
GB30644358	Douster Pond	6	2	England
GB30644398	Bewl Water	6	2	England
GB30644464	Cranmer Pond	6	2	England
GB30644482	Woolmer Pond	6	2	England
GB30644576	Forest Mere	6	2	England
GB30647003	Banbury Reservoir	6	2	England
GB30647022	Littleworth Ponds	6	2	England
GB30647024	Marden Meadow Ponds	6	2	England
GB30743087	Stodmarsh Nature Reserve Pool	7	2	England
GB30743097	Great Puckstone	7	2	England
GB30743127	Westbere Lakes	7	2	England
GB30743156	Fordwhich Lake East	7	2	England
GB30743164	Fordwich Lakes	7	2	England
GB30744067	Vann Lake	7	2	England
GB30744422	Marsh Court Lake	7	2	England
GB30744431	Old Alresford Pond	7	2	England
GB30744522	Shillinglee Lake	7	2	England
GB30744533	Ardingly Reservoir	7	2	England
GB30744545	Stew Pond	7	2	England
GB30744588	Hawkins Pond	7	2	England
GB30744738	Romney Warren Pond	7	2	England
GB30744935	Greatstone Lake	7	2	England
GB30744955	Darwell Reservoir	7	2	England
GB30745009	North Point Lake, Rye Golf Club	7	2	England
GB30745011	Powdermill Reservoir	7	2	England
GB30745015	Dungeness Gravel Pit	7	2	England
GB30745035	Castle Water	7	2	England
GB30745055	Nook Beach	7	2	England
GB30745060	Burrows Pit	7	2	England
GB30745061	Hookers Pit	7	2	England
GB30745064	Long Pit	7	2	England
GB30745108	Burton Mill Pond	7	2	England
GB30745429	Arlington Reservoir	7	2	England
GB30745606	Titchfield Haven	7	2	England
GB30745652	Hatchet Pond	7	2	England
GB30745790	Sowley Pond	7	2	England
GB30843764	Slade Lower Reservoir	8	1	England
GB30843794	Slade Higher Reservoir	8	1	England
GB30843867	Nutscale Reservoir	8	1	England
GB30843906	Pinkery Pond	8	1	England
GB30843922	Wistlandpound Reservoir	8	1	England
GB30844158	Ashford Reservoir	8	2	England

GB30844261	Durleigh Reservoir	8	2	England
GB30844267	Hawkridge Reservoir	8	2	England
GB30844471	Wimbleball Lake	8	1	England
GB30844473	Clatworthy Reservoir	8	1	England
GB30844781	Gammaton Lower Reservoir	8	1	England
GB30844798	Gammaton Upper Reservoir	8	1	England
GB30844801	Jennetts Reservoir	8	1	England
GB30845010	Melbury Reservoir	8	1	England
GB30845095	Breamore Marsh Ponds	8	2	England
GB30845115	Luxhay Reservoir	8	2	England
GB30845117	Leigh Reservoir	8	2	England
GB30845143	Sherborne Lake	8	2	England
GB30845271	Otterhead Reservoir	8	2	England
GB30845277	Upper Tamar Lake	8	1	England
GB30845316	Sutton Bingham Reservoir	8	2	England
GB30845324	Lower Tamar Lake	8	1	England
GB30845377	Mockbeggar Lake	8	2	England
GB30845412	Ivy Lake	8	2	England
GB30845427	Ellingham Lake	8	2	England
GB30845428	Blashford Lake	8	2	England
GB30845441	Snails Lake	8	2	England
GB30845446	Linbrook Lake	8	2	England
GB30845598	North Common Lake	8	2	England
GB30845729	Holmsley Gravel Pit	8	2	England
GB30845945	Meldon Reservoir	8	1	England
GB30846102	Little Sea	8	2	England
GB30846114	Kennick Reservoir	8	1	England
GB30846123	Fernworthy Reservoir	8	1	England
GB30846129	Sqabmoor Reservoir	8	2	England
GB30846131	Crowdy Reservoir	8	1	England
GB30846138	Tottiford Reservoir	8	1	England
GB30846161	Trenchford Reservoir	8	1	England
GB30846225	Colliford Lake	8	1	England
GB30846229	Stover Lake	8	1	England
GB30846232	Dozmary Pool	8	1	England
GB30846262	Siblyback Lake	8	1	England
GB30846264	Venford Reservoir	8	1	England
GB30846279	Burrator Reservoir	8	1	England
GB30846284	Red Lake Pool	8	1	England
GB30846291	Avon Dam Reservoir	8	1	England
GB30846305	Ugborough Reservoir	8	1	England
GB30846317	Red Moor Pond	8	1	England
GB30846472	Slapton Ley	8	1	England
GB30846501	Stithians Reservoir	8	1	England
GB30846509	Cargenwyn Reservoir	8	1	England
GB30846516	College Reservoir	8	1	England
GB30846526	Argal Reservoir	8	1	England
GB30846547	Drift Reservoir	8	1	England
GB30846556	The Loe	8	1	England
GB30847000	Roadford Lake	8	1	England
GB30847016	Ibsley Water	8	2	England

GB30847017	Rockford Lake	8	2	England
GB30847044	Priors Park Reservoir	8	2	England
GB30934859	Maer Pool	9	2	England
GB30935079	Cole Mere	9	2	England
GB30935091	White Mere	9	2	England
GB30935211	Crose Mere	9	2	England
GB30935212	Sweat Mere	9	2	England
GB30935568	Llyn Efyrnwy	9	1	Wales
GB30935570	Morton Pool	9	2	England
GB30935620	Fenemere	9	2	England
GB30935724	Aqualate Mere	9	2	England
GB30936544	Bomere Pool	9	2	England
GB30936566	Betton Pool	9	2	England
GB30936578	Shomere Pool	9	2	England
GB30936624	Coalmoor Quarry	9	1	England
GB30936634	Berrington Pool	9	2	England
GB30936881	Marton Pool	9	1	England
GB30937446	Llyn Clywedog	9	1	Wales
GB30937599	Fens Top Pool	9	2	England
GB30228429	Thurstonfield Lough	2	1	England
GB30228476	Castle Carrock Reservoir	2	1	England
GB30228559	Cotehill Pond	2	1	England
GB30228955	Ullswater	2	1	England
GB30229073	Haweswater Reservoir	2	1	England
GB30229083	Red Tarn Helvellyn	2	1	England
GB30229116	Brothers Water	2	1	England
GB30229125	Hayeswater	2	1	England
GB30229129	Grisedale Tarn	2	1	England
GB30229146	Blea Water	2	1	England
GB30326917	Lake at Haggerston Castle Holiday Park	3	1	England
GB30327556	Linshiels Lake	3	1	England
GB30327568	Catcleugh Reservoir	3	1	England
GB30327677	Fontburn Reservoir	3	1	England
GB30327698	Kielder Water	3	1	England
GB30327880	Sweethope Loughs	3	1	England
GB30327908	Bolam Lake	3	1	England
GB30327960	Colt Crag Reservoir	3	1	England
GB30327976	Little Swinburne Reservoir	3	1	England
GB30327979	Hallington Reservoirs	3	1	England
GB30328075	Big Waters Reservoir	3	1	England
GB30328165	Greenlee Lough	3	1	England
GB30328172	Broomlee Lough	3	1	England
GB30328202	Great Northern Reservoir	3	1	England
GB30328220	Crag Lough	3	1	England
GB30328222	Harlow Hill Reservoir	3	1	England
GB30328225	Low Reservoir to Henderson Filters	3	1	England
GB30328236	Great Southern Reservoir	3	1	England
GB30328314	Shibdon Pond	3	1	England
GB30328395	Tindale Tarn	3	1	England
GB30328504	Airy Holm Reservoir	3	1	England
GB30328519	Derwent Reservoir	3	1	England

GB30328629	Joes Pond Rainton Bridge	3	1	England
GB30328671	Hisehope Reservoir	3	1	England
GB30328674	Smiddy Shaw Reservoir	3	1	England
GB30328686	Brasside Pond	3	1	England
GB30328696	Waskerley Reservoir	3	1	England
GB30328720	Tunstall Reservoir	3	1	England
GB30328742	Burnhope Reservoir	3	1	England
GB30328743	Butterby Oxbow	3	1	England
GB30328751	Lakes at Cassop	3	2	England
GB30328825	Hurworth Burn Reservoir	3	2	England
GB30328850	Crookfoot Reservoir	3	2	England
GB30328860	Cow Green Reservoir	3	1	England
GB30328862	Whitton Castle East Lake	3	1	England
GB30328976	Grassholme Reservoir	3	1	England
GB30328995	Selset Reservoir	3	1	England
GB30329011	Hury Reservoir	3	1	England
GB30329022	Lovell Hill Pools	3	2	England
GB30329025	Balderhead Reservoir	3	1	England
GB30329027	Blackton Reservoir	3	1	England
GB30431243	Scammonden Water	4	1	England
GB30431247	Green Withens Reservoir	4	1	England
GB30431248	Booth Wood Reservoir	4	1	England
GB30431297	Deanhead Reservoir	4	1	England
GB30431382	Blackmoorfoot Reservoir	4	1	England
GB30431455	Deer Hill Reservoir	4	1	England
GB30431517	Butterley Reservoir	4	1	England
GB30431565	Blakeley Reservoir	4	1	England
GB30431609	Wessenden Reservoir	4	1	England
GB30431667	Wessenden Head Reservoir	4	1	England
GB30431685	Digley Reservoir	4	1	England
GB30431693	Bilberry Reservoir	4	1	England
GB30431725	Broadstone Reservoir	4	1	England
GB30431731	Brownhill Reservoir	4	1	England
GB30431740	Ingbirchworth Reservoir	4	1	England
GB30431771	Ramsden Reservoir	4	1	England
GB30431796	Riding Wood Reservoir	4	1	England
GB30431800	Royd Moor Reservoir	4	1	England
GB30431809	Cadney Reservoir	4	2	England
GB30431821	Yateholme Reservoir	4	1	England
GB30431848	Snailsden Reservoir	4	1	England
GB30431864	Harden Reservoir	4	1	England
GB30431876	Winscar Reservoir	4	1	England
GB30431968	Windleden Reservoir - Lower	4	1	England
GB30431994	Windleden Reservoir - Upper	4	1	England
GB30432002	Sprotborough Flash	4	2	England
GB30432034	Langsett Reservoir	4	1	England
GB30432078	Midhope Reservoir	4	1	England
GB30432209	Covenham Reservoir	4	2	England
GB30432223	Broomhead Reservoir	4	1	England
GB30432240	Misson Line Bank	4	2	England
GB30432299	Howden Reservoir	4	1	England

GB30432352	Agden Reservoir	4	1	England
GB30432359	Derwent Upper Reservoir	4	1	England
GB30432388	Dale Dike Reservoir	4	1	England
GB30432418	Strines Reservoir	4	1	England
GB30432459	Ladybower Reservoir	4	1	England
GB30432568	Rivelin Dams	4	1	England
GB30432627	Redmires Reservoirs	4	1	England
GB30433056	Clumber Lake	4	2	England
GB30433100	Welbeck Great Lake	4	2	England
GB30433178	Linacre Reservoirs	4	1	England
GB30433316	Thoresby Lake	4	2	England
GB30433781	Ogston Reservoir	4	1	England
GB30433784	Rudyard Reservoir	4	1	England
GB30433790	Tittesworth Reservoir	4	1	England
GB30433908	L Lake	4	2	England
GB30434381	Sledder Wood Pond	4	2	England
GB30434401	Bulwell Wood Ponds	4	2	England
GB30434709	Kedleston Hall Lower Lake	4	2	England
GB30434977	Attenborough Nature Reserve - Beeston Pond	4	2	England
GB30434995	Attenborough Nature Reserve - Main Pond	4	2	England
GB30435028	Holme Pit	4	2	England
GB30435060	Attenborough Nature Reserve - Coneries Pond	4	2	England
GB30435122	Church Wilne Reservoir	4	2	England
GB30435238	Cop Mere	4	2	England
GB30435310	The Old Dove	4	2	England
GB30435478	Blithfield Reservoir	4	2	England
GB30435548	Foremark Reservoir	4	2	England
GB30435554	Staunton Harold Reservoir	4	2	England
GB30435572	Ticknall Quarries	4	2	England
GB30435928	Blackbrook Reservoir	4	2	England
GB30436069	Colony Reservoir	4	2	England
GB30436108	Swithland Reservoir	4	2	England
GB30436331	Cropston Reservoir	4	2	England
GB30436396	Belvide Reservoir	4	2	England
GB30436433	Stowe Pool	4	2	England
GB30436523	Chasewater	4	2	England
GB30436536	Groby Pool	4	2	England
GB30437109	Bracebridge Pool	4	2	England
GB30437497	Shustoke Reservoirs	4	2	England
GB30437758	Edgbaston Pool	4	2	England
GB30447001	Moor Monkton Storage Reservoir	4	2	England
GB30447006	Carsington Water	4	1	England
GB30447020	Clumber Park Lake West	4	2	England
GB30533132	Sea Bank Clay Pits	5	2	England
GB30533426	Swanholme Lakes	5	2	England
GB30533852	Tattershall Old Gravel Pits	5	2	England
GB30535397	Captains Pond	5	2	England
GB30535640	Hickling Broad	5	2	England
GB30535645	Horsey Mere	5	2	England
GB30535655	Barton Broad	5	2	England

GB30535738	Martham Broad	5	2	England
GB30535953	Wroxham Broad	5	2	England
GB30535959	Decoy Broad	5	2	England
GB30535977	Hoveton Great Broad	5	2	England
GB30536029	Cockshoot Broad	5	2	England
GB30536050	Ranworth Broad	5	2	England
GB30536202	Upton Broad	5	2	England
GB30536219	Costessey Pits	5	2	England
GB30536344	Langtoft Gravel Pits	5	2	England
GB30536422	Tallington Lakes Main Lake	5	2	England
GB30536479	Rutland Water	5	2	England
GB30536730	Rockland Broad	5	2	England
GB30536975	Sea Mere	5	2	England
GB30536980	Lound Mill Water	5	2	England
GB30536989	Fritton Decoy	5	2	England
GB30537182	Eyebrook Reservoir	5	2	England
GB30537306	Thompson Water	5	2	England
GB30537461	Old Buckenham Fen Mere	5	2	England
GB30537913	Thrapston Lake	5	2	England
GB30538132	Hollowell Reservoir	5	2	England
GB30538167	Upware North Pit	5	2	England
GB30940556	Pentwyn Reservoir	9	1	Wales
GB30940600	Pontsticill Reservoir	9	1	Wales
GB30940604	Llangynidr Reservoir	9	1	Wales
GB30940626	Cairn Mound Reservoir	9	1	Wales
GB30940635	Carno Reservoir	9	1	Wales
GB30940636	Blaen-y-cwm Reservoir	9	1	Wales
GB30940648	Llwyn-on Reservoir	9	1	Wales
GB30940712	Shon Sheffreys Reservoir	9	1	Wales
GB30940714	Soudley Ponds	9	1	England
GB30940869	Scotch Peters Reservoir	9	1	Wales
GB30940941	St James Reservoir	9	1	Wales
GB30940946	Frampton Gravel Pits	9	2	England
GB30940987	Nant-moel Reservoir	9	1	Wales
GB30941017	Nanthir Reservoir	9	1	Wales
GB30941167	Nant yr mailor Reservoir	9	1	Wales
GB30941175	Cwmsychan Reservoir	9	1	Wales
GB30941303	Lluest-wen Reservoir	9	1	Wales
GB30941363	Llandegfedd Reservoir	9	1	Wales
GB30941377	Castell Nos Reservoir	9	1	Wales
GB30941762	Wentwood Reservoir	9	1	Wales
GB30941829	Pant-yr-eos Reservoir	9	1	Wales
GB30941926	Ynysyfro Reservoir	9	1	Wales
GB30942598	Monkswood Reservoir	9	2	England
GB30942798	Barrow Reservoir	9	2	England
GB30943096	Chew Valley lake	9	2	England
GB30943135	Blagdon Lake	9	2	England
GB30943348	Cheddar Reservoir	8	2	England
GB30943528	Mineries Pool	8	2	England
GB30947023	Lyppard Grange	9	2	England
GB30947042	Cardiff Bay	9	1	Wales

GB31032435	Llyn Llygeirian	10	1	Wales
GB31032538	Llyn Alaw	10	1	Wales
GB31032926	Cefni Reservoir	10	1	Wales
GB31032948	Llyn Dinam	10	1	Wales
GB31033261	Plas Uchaf and Dolwen Reservoirs	10	1	Wales
GB31033337	Llyn Coron	10	1	Wales
GB31033537	Dulyn Reservoir	10	1	Wales
GB31033571	Llyn Eigiau Reservoir	10	1	Wales
GB31033578	Melynllyn	10	1	Wales
GB31033686	Llyn Cowlyd Reservoir	10	1	Wales
GB31033699	Ffynnon Llugwy Reservoir	10	1	Wales
GB31033722	Marchlyn Bach Reservoir	10	1	Wales
GB31033730	Llyn Padarn	10	1	Wales
GB31033737	Marchlyn Mawr Reservoir	10	1	Wales
GB31033803	Llyn Ogwen	10	1	Wales
GB31033828	Llyn Peris	10	1	Wales
GB31033836	Llyn Idwal	10	1	Wales
GB31033974	Llyn Cwmffynnon	10	1	Wales
GB31034002	Llyn Cwellyn	10	1	Wales
GB31034008	Llyn Elsi Reservoir	10	1	Wales
GB31034033	Llyn Llydaw	10	1	Wales
GB31034042	Glaslyn	10	1	Wales
GB31034249	Llyn Cwm Dulyn	10	1	Wales
GB31034319	Llyn Llagi	10	1	Wales
GB31034400	Llyn Conwy	10	1	Wales
GB31034490	Llyn Cwmystradllyn	10	1	Wales
GB31034511	Llynnau Gamallt	10	1	Wales
GB31034613	Llyn Morwynion	10	1	Wales
GB31034866	Llyn Tecwyn Uchaf	10	1	Wales
GB31034870	Llyn Trawsfynydd	10	1	Wales
GB31034895	Llyn y Garn	10	1	Wales
GB31035056	Llyn Eiddew-mawr	10	1	Wales
GB31035111	Llyn Gelli Gain	10	1	Wales
GB31035180	Llyn Cwm Bychan	10	1	Wales
GB31035426	Llyn Hywel	10	1	Wales
GB31035561	Llyn Bodlyn	10	1	Wales
GB31035578	Llyn Cwm Mynach	10	1	Wales
GB31035712	Llyn Cynwch	10	1	Wales
GB31036267	Llyn Cau	10	1	Wales
GB31036405	Tal-y-llyn Lake	10	1	Wales
GB31037596	Nant-y-moch Reservoir	10	1	Wales
GB31037641	Llyn Llygad Rheidol	10	1	Wales
GB31037690	Llyn Craigypistyll	10	1	Wales
GB31037834	Llynnoedd Ieuan	10	1	Wales
GB31038390	Llyn Teifi	10	1	Wales
GB31038394	Llyn Hir	10	1	Wales
GB31038398	Pond y Gwaith	10	1	Wales
GB31038409	Llyn Egnant	10	1	Wales
GB31039020	Llyn Brianne Reservoir	10	1	Wales
GB31039942	Rosebush Reservoir	10	1	Wales
GB31040087	Llys-y-fran Reservoir	10	1	Wales

GB31040457	Ystradfellte Reservoir	10	1	Wales
GB31040990	Penderyn Reservoir	10	1	Wales
GB31041050	Upper Lliw Reservoir	10	1	Wales
GB31041145	Upper Lliedi Reservoir	10	1	Wales
GB31041177	Lower Lliw Reservoir	10	1	Wales
GB31041203	Cwm Llied Reservoir	10	1	Wales
GB31041219	Llyn Fawr	10	1	Wales
GB31042079	Eglwys Nunydd Reservoir	10	1	Wales
GB31042170	Kenfig Pool	10	1	Wales
GB31047013	Bosherton Lily Ponds (Eastern Arm)	10	1	Wales
GB31047014	Bosherton Lily Ponds (Central Arm)	10	1	Wales
GB31047015	Bosherton Lily Ponds (West Arm and Central)	10	1	Wales
GB31047043	Hafoty Reservoir	10	1	Wales
GB31133644	Cilcain Reservoir No. 2	11	1	Wales
GB31133659	Moel Dywyll	11	1	Wales
GB31133661	Cilcain Reservoir No 3	11	1	Wales
GB31133854	Llyn Bran	11	1	Wales
GB31133923	Llyn Brenig	11	1	Wales
GB31133976	Alwen Reservoir	11	1	Wales
GB31134038	Llyn Cyfynwy	11	1	Wales
GB31134102	Nant-y-Ffrith Reservoir	11	1	Wales
GB31134167	Pendinas Reservoir	11	1	Wales
GB31134331	Ty Mawr Reservoir	11	1	Wales
GB31134377	Pant Glas	11	1	Wales
GB31134451	Pencaye Bottom Reservoir	11	1	Wales
GB31134454	Pencaye Top Reservoir	11	1	Wales
GB31134633	Llyn Arenig Fach	11	1	Wales
GB31134644	Llyn Celyn	11	1	Wales
GB31134780	Hanmer Mere	11	2	Wales
GB31134813	Llyn Bedydd	11	2	Wales
GB31134854	Llyn Tryweryn	11	1	Wales
GB31134864	Llyn Arenig fawr	11	1	Wales
GB31134987	Llyn Tegid	11	1	Wales
GB31147045	Mill Pond	11	1	Wales
GB31228796	Chapelhouse Reservoir	12	1	England
GB31228806	Over Water	12	1	England
GB31228847	Bassenthwaite Lake	12	1	England
GB31228873	Siddick Pond	12	1	England
GB31228965	Derwent Water	12	1	England
GB31228986	Loweswater	12	1	England
GB31229000	Crummock Water	12	1	England
GB31229021	Thirlmere	12	1	England
GB31229052	Buttermere	12	1	England
GB31229062	Ennerdale Water	12	1	England
GB31229097	Blea Tarn	12	1	England
GB31229153	Scoat Tarn	12	1	England
GB31229183	Wast Water	12	1	England
GB31230203	Grizedale Lea Reservoir	12	1	England
GB31230222	Barnacre Reservoirs	12	1	England
GB31230377	Laneshaw Reservoir	12	1	England

GB31230390	Black Moss Reservoirs	12	1	England
GB31230422	Ogden Lower Reservoir	12	1	England
GB31230431	Ogden Upper Reservoir	12	1	England
GB31230459	Churn Clough Reservoir	12	1	England
GB31230515	Walverden Reservoir	12	1	England
GB31230519	Alston No 2 Reservoir	12	1	England
GB31230522	Alston No 1 Reservoir	12	1	England
GB31230523	Coldwell Lower Reservoir	12	1	England
GB31230531	Alston Reservoirs	12	1	England
GB31230533	Coldwell Upper Reservoir	12	1	England
GB31230585	Lee Green Reservoir	12	1	England
GB31230590	Swinden Lower Reservoir	12	1	England
GB31230591	Swinden Higher Reservoir	12	1	England
GB31230600	Dean Clough Reservoir	12	1	England
GB31230625	Hurstwood Reservoir	12	1	England
GB31230663	Cant Clough Reservoir	12	1	England
GB31230769	Clowbridge Reservoir	12	1	England
GB31230812	Mitchells House Reservoir No 1	12	1	England
GB31230833	Mitchells House Reservoir No 2	12	1	England
GB31230858	Clough Bottom Reservoir	12	1	England
GB31230883	Fishmoor Reservoir	12	1	England
GB31230893	Guide Reservoir	12	1	England
GB31230958	Pickup Bank Reservoir	12	1	England
GB31231013	Ogden Reservoir Lancashire	12	1	England
GB31231025	Calf Hey Reservoir	12	1	England
GB31231027	Holden Wood Reservoir	12	1	England
GB31231033	Roddlesworth Lower Reservoir	12	1	England
GB31231036	Rake Brook Reservoir	12	1	England
GB31231039	Earnsdale Reservoir	12	1	England
GB31231042	Roddlesworth Upper Reservoir	12	1	England
GB31231043	Sunnyhurst Hey Reservoir	12	1	England
GB31231115	Cowpe Reservoir	12	1	England
GB31231130	Scout Moor Reservoir	12	1	England
GB31231141	Cowm Reservoir	12	1	England
GB31231164	Watergrove Reservoir	12	1	England
GB31231168	Blackstone Edge Reservoir	12	1	England
GB31231190	Anglezarke Reservoir	12	1	England
GB31231200	Wayoh Reservoir	12	1	England
GB31231202	Turton and Entwistle Reservoir	12	1	England
GB31231212	Spring Mill Reservoir	12	1	England
GB31231229	Middle Naden Reservoir	12	1	England
GB31231232	High Bullough Reservoir	12	1	England
GB31231250	Lower Naden Reservoir	12	1	England
GB31231260	Greenbooth Reservoir	12	1	England
GB31231264	Delph Reservoir	12	1	England
GB31231266	Yarrow Reservoir	12	1	England
GB31231267	Ashworth Moor Reservoir	12	1	England
GB31231288	Rivington Reservoirs	12	1	England
GB31231306	Jumbles Reservoir	12	1	England
GB31231312	Springs Reservoir	12	1	England
GB31231314	Dingle Reservoir	12	1	England

GB31231367	Norman Hill Reservoir	12	1	England
GB31231393	Piethorne Reservoir	12	1	England
GB31231398	Ogden Reservoir Rochdale	12	1	England
GB31231399	Kitcliffe Reservoir	12	1	England
GB31231404	Readycon Dean Reservoir	12	1	England
GB31231405	Hanging Lees Reservoir	12	1	England
GB31231435	Rooden Reservoir	12	1	England
GB31231454	Crook Gate Reservoir	12	1	England
GB31231476	Adlington Reservoir	12	1	England
GB31231482	Dowry Reservoir	12	1	England
GB31231496	Worthington Reservoir	12	1	England
GB31231508	New Years Bridge Reservoir	12	1	England
GB31231531	Upper and Lower Castleshaw Reservoirs	12	1	England
GB31231778	Greenfield Reservoir	12	1	England
GB31231791	Yeoman Hey Reservoir	12	1	England
GB31231829	Dovestone Reservoir	12	1	England
GB31231942	Chew Reservoir	12	1	England
GB31232065	Woodhead Reservoir	12	1	England
GB31232066	Higher Swineshaw Reservoir	12	1	England
GB31232085	Pennington Flash	12	2	England
GB31232094	Lower Swineshaw Reservoir	12	1	England
GB31232108	Brushes Reservoir	12	1	England
GB31232111	Torside Reservoir	12	1	England
GB31232112	Walkerwood Reservoir	12	1	England
GB31232136	Rhodeswood Reservoir	12	1	England
GB31232150	Valehouse Reservoir	12	1	England
GB31232166	Arnfield Reservoir	12	1	England
GB31232183	Audenshaw Reservoirs	12	1	England
GB31232242	Upper Swineshaw Reservoir	12	1	England
GB31232245	Swineshaw Reservoir	12	1	England
GB31232499	Kinder Reservoir	12	1	England
GB31232650	Rostherne Mere	12	2	England
GB31232665	Appleton Reservoir	12	2	England
GB31232729	Little Mere	12	2	England
GB31232744	The Mere Tatton Park	12	2	England
GB31232787	Melchett Mere	12	2	England
GB31232793	Toddbrook Reservoir	12	1	England
GB31232804	Tatton Mere	12	2	England
GB31232895	Tatton Mere West	12	2	England
GB31232898	Tatton Mere South	12	2	England
GB31232950	Fernilee Reservoir	12	1	England
GB31232960	Tabley Mere	12	2	England
GB31233043	Errwood Reservoir	12	1	England
GB31233063	Lamaload Reservoir	12	1	England
GB31233210	Hatch Mere	12	2	England
GB31233236	Teggs Nose Reservoir	12	1	England
GB31233243	Bottoms Reservoir Macclesfield	12	1	England
GB31233247	Trentabank Reservoir	12	1	England
GB31233250	Ridgegate Reservoir	12	1	England
GB31233310	Black Lake	12	2	England
GB31233344	Petty Pool	12	2	England

GB31233474	Oakmere	12	2	England
GB31234162	Chapel Mere	12	2	England
GB31234260	Norbury Meres	12	2	England
GB31234328	Bar Mere	12	2	England
GB31234330	Betley Mere	12	2	England
GB31234438	Quoisley Big Mere	12	2	England
GB31234441	Quoisley Little Mere	12	2	England
GB31234480	Combermere	12	2	England
GB31234545	Oss Mere	12	2	England
GB31247004	Bollinhurst Reservoir	12	1	England
GB31247005	Horse Coppice Reservoir	12	1	England
GB31247007	Windermere (N Basin)	12	1	England
GB31247008	Windermere (S Basin)	12	1	England
GB31247019	Black Mere	12	2	England
GB31247021	Cockerham	12	1	England
GB31247026	Mawbray Banks	12	1	England
GB31247027	Sound Common North Pond	12	2	England
GB30329099	Lockwood Beck Reservoir	3	2	England
GB30329148	Hell Kettles	3	2	England
GB30347025	New Hartley Ponds	3	1	England
GB30347036	Bakethin	3	1	England
GB30429122	Scaling Dam Reservoir	4	2	England
GB30429296	Cod Beck Reservoir	4	2	England
GB30429479	Semer Water	4	1	England
GB30429545	Gormire Lake	4	2	England
GB30429612	Leighton Reservoir	4	1	England
GB30429634	Roundhill Reservoir	4	1	England
GB30429639	Scar House Reservoir	4	1	England
GB30429658	Angram Reservoir	4	1	England
GB30429697	Black Heath Pond	4	2	England
GB30429769	Lumley Moor Reservoir	4	1	England
GB30429770	Gouthwaite Reservoir	4	1	England
GB30429844	Malham Tarn	4	1	England
GB30429866	Grimwith Reservoir	4	1	England
GB30429990	Thruscross Reservoir	4	1	England
GB30430012	Upper Barden Reservoir	4	1	England
GB30430033	Lower Barden Reservoir	4	1	England
GB30430068	Fewston Reservoir	4	1	England
GB30430079	Beaver Dyke Reservoir	4	1	England
GB30430081	Embsay Reservoir	4	1	England
GB30430091	Swinsty Reservoir	4	1	England
GB30430099	Scargill Reservoir	4	1	England
GB30430102	Ten Acre Reservoir	4	1	England
GB30430124	Chelker Reservoir	4	1	England
GB30430244	Hornsea Mere	4	2	England
GB30430323	Carr Bottom Reservoir	4	1	England
GB30430357	Reva Reservoir	4	1	England
GB30430370	Graincliffe Reservoir	4	1	England
GB30430372	Weecher Reservoir	4	1	England
GB30430374	Eccup Reservoir	4	1	England
GB30430435	Keighley Moor Reservoir	4	1	England

GB30430471	Water Sheddles Reservoir	4	1	England
GB30430489	Ponden Reservoir	4	1	England
GB30430504	Lower Laithe Reservoir	4	1	England
GB30430563	Walshaw Dean Upper Reservoir	4	1	England
GB30430571	Leeming Reservoir	4	1	England
GB30430575	Walshaw Dean Middle Reservoir	4	1	England
GB30430594	Walshaw Dean Lower Reservoir	4	1	England
GB30430596	Thornton Moor Reservoir	4	1	England
GB30430598	Stubden Reservoir	4	1	England
GB30430604	Widdop Reservoir	4	1	England
GB30430621	Warley Moor Reservoir	4	1	England
GB30430632	Gorple Lower Reservoir	4	1	England
GB30430633	Gorple Upper Reservoir	4	1	England
GB30430651	Ogden Water	4	1	England
GB30430670	Dean Head Upper Reservoir	4	1	England
GB30430680	Dean Head Lower Reservoir	4	1	England
GB30430694	Castle Carr Reservoir	4	1	England
GB30430722	Barmby	4	2	England
GB30430735	Mixenden Reservoir	4	1	England
GB30430809	Mickletown Ings	4	2	England
GB30430917	Ardsley Reservoir	4	1	England
GB30430996	Withens Clough Reservoir	4	1	England
GB30430999	Gorpley Reservoir	4	1	England
GB30431070	Warland Reservoir	4	1	England
GB30431071	Ramsden Clough Reservoir	4	1	England
GB30431104	White Holme Reservoir	4	1	England
GB30431150	Baitings Reservoir	4	1	England
GB30431153	Ryburn Reservoir	4	1	England
GB30431169	Ringstone Edge Reservoir	4	1	England
GB31229184	Grasmere	12	1	England
GB31229203	Low Church Moss Pond	12	1	England
GB31229215	Burnmoor Tarn	12	1	England
GB31229222	Elter Water	12	1	England
GB31229231	Little Langdale Tarn	12	1	England
GB31229254	Dubbs Reservoir	12	1	England
GB31229270	Blelham Tarn	12	1	England
GB31229275	Tarn Hows	12	1	England
GB31229285	Levers Water	12	1	England
GB31229321	Coniston Water	12	1	England
GB31229323	Priest Pot	12	1	England
GB31229328	Esthwaite Water	12	1	England
GB31229334	Three Dubs Tarn	12	1	England
GB31229338	Devoke Water	12	1	England
GB31229353	Skelsmergh Tarn	12	1	England
GB31229371	Jenny Dam	12	1	England
GB31229388	Knipe Tarn	12	1	England
GB31229419	Ghyll Head Reservoir	12	1	England
GB31229430	Killington Reservoir	12	1	England
GB31229488	Simpson Ground Reservoir	12	1	England
GB31229599	Harlock Reservoir	12	1	England
GB31229607	Pennington Reservoir	12	1	England

GB31229615	Poaka Beck Reservoir	12	1	England
GB31229647	Hawes Water	12	1	England
GB31229988	Langthwaite Reservoir	12	1	England
GB31230025	Damas Gill	12	1	England
GB31230030	Stocks Reservoir	12	1	England
GB31230199	Grizedale Reservoir	12	1	England