

SCHEDULE 1

PART 1

Criteria for identifying the types of river, lake or transitional water to which the environmental standards specified in Part 2 of this Schedule apply

1. Subject to paragraph 2, to determine the dissolved oxygen, ammonia and biochemical oxygen demand standards applicable to a river or any part thereof, the Department must assign to that river or part thereof the Type specified in Table 1 below which corresponds with the applicable site altitude and applicable alkalinity range specified in that Table.

2. Having assigned a Type in accordance with Table 1, the Department must assign the subsequent Type in accordance with column 1 of Table 2 below.

3. To determine the morphological conditions applicable to a river or part thereof, the Department must assign to that river or part thereof the Type specified in Table 3 below which corresponds with the applicable descriptions in that Table.

4. To determine the river flow standards applicable to a river or any part thereof, the Department must assign the Type specified in column 1 of Table 4 below which corresponds to the applicable descriptions specified in columns 2, 3 and 4 of that Table.

5. To determine the total phosphorus standards to apply to a lake or any part thereof, the Department must assign to that lake or part thereof the appropriate geological category, depth category and colour category specified in Tables 5, 6 and 7 below respectively.

6. To determine the lake level standards applicable to a lake or any part thereof, the Department must assign the Type specified in Columns 1 and 2 of Table 8.

7. To determine the morphological conditions applicable to a lake or any part thereof, the Department must assign the hydromorphological characteristics of the lake or part thereof as being of the type specified in column 1 of Table 9 below which corresponds to the applicable measurements specified in columns 3 and 4 of that Table.

Table 1

Criteria for identifying the types of river to which the dissolved oxygen, ammonia and biochemical oxygen demand standards for rivers apply

<i>Site Altitude</i>	<i>Alkalinity (as mg/l CaCO₃)</i>					
	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

<i>Final typology for dissolved oxygen, ammonia and biochemical oxygen demand in rivers</i>	
Column 1	Column 2
Upland and low alkalinity	Types (1+2), 4 and 6
Lowland and high alkalinity	Types 3, 5 and 7

Changes to legislation: There are currently no known outstanding effects for the The Water Framework Directive (Classification, Priority Substances and Shellfish Waters) Regulations (Northern Ireland) 2015, PART 1. (See end of Document for details)

Table 3

Criteria for identifying types of river to which morphological conditions apply

<i>Type</i>	<i>Characteristics</i>						
Bedrock channel	Normally high altitude	Channel cuts down laterally	cuts	down	May have waterfalls and/or cascades	Bedrock substrate	
Cascade Step Pool	Normally high altitude	Channel cuts down	cuts	down	Both turbulent and tranquil flows	Cobble and boulder substrate	
Pool-riffle-glide	Normally medium altitude	Often not confined within a valley	not	confined	Slightly meandering	Pebble and cobble substrate	
Meandering	Normally low altitude	Flow would interact with floodplain	laminar	and naturally	Meandering	More fines than other substrates	

Table 4

Criteria for identifying types of river to which the river flow standards apply

Column 1 <i>Type</i>	Column 2 <i>Standard Annual Rainfall mm (period 1961-1990)</i>	Column 3 <i>Base Flow Index (BFI)</i>	Column 4 <i>Catchment area (km²)</i>
A1	< 810.5	< 0.715	Any
		≥ 0.715	≥ 251.8
A2	< 810.5	≥ 0.715	< 251.8
	≥ 810.5 and < 1413	≥ 0.7495	Any
			≤ 100 (A2 headwaters) > 100 (A2 downstream)
B1	≥ 810.5 and < 1155	≥ 0.3615 and < 0.7495	< 267.4
B2	≥ 810.5 and < 1413	≥ 0.3615 and < 0.7495	< 267.4
C2	≥ 1155 and < 1413	≥ 0.3615 and < 0.7495	< 267.4
	≥ 1413	≥ 0.3615	≥ 32.33
D2	≥ 1413	≥ 0.3615	< 32.33
	≥ 810.5	< 0.3615	Any

Table 5

Geological categories to which total phosphorus, phytoplankton and phytobenthos standards for lakes apply

<i>Geological category</i>	<i>Annual mean alkalinity (micro-equivalents per litre)</i>
Low alkalinity	< 200
Moderate alkalinity	200 – 1000
High alkalinity	> 1000
Marl	

Table 6

Depth categories to which total phosphorus standards for lakes apply

<i>Depth category</i>	<i>Mean depth (metres)</i>
Very shallow	< 3
Shallow	3 – 15
Deep	> 15

Table 7

Colour categories to which total phosphorus standards for lakes apply

<i>Colour category</i>	<i>Platinum (mg/l)</i>
Humic	> 30
Non humic	≤ 30

Table 8

Geological characteristics used to identify lake types to which lake level standards apply

<i>Categories</i>	
Column 1	Column 2
<i>Peat</i>	<i>Non-Peat</i>
mean water colour ≥90 hazen units; or ≥75% of solid catchment area comprised of peat	mean water colour <90 hazen units; or <75% of solid catchment area comprised of peat

Table 9

Hydromorphological characteristics used to identify lake types to which morphological conditions apply

Column 1	Column 2	Column 3	Column 4
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¹ Morphological Impact Assessment System

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Type	Lake-MImAS¹ code	Mean Depth	Alkalinity
Low Alkalinity Very Shallow	P/L-vS	<4m	< 20 mg ^l ⁻¹ CaCO ₃
Low Alkalinity Shallow/ Deep	P/L-ShD	>4m	< 20 mg ^l ⁻¹ CaCO ₃
Moderate Alkalinity Very Shallow	MA-vS	<4m	20 – 100 mg ^l ⁻¹ CaCO ₃
Moderate Alkalinity Shallow/Deep	MA-ShD	>4m	20 – 100 mg ^l ⁻¹ CaCO ₃
High Alkalinity Very Shallow	HA/M-vS	<4m	> 100 mg ^l ⁻¹ CaCO ₃
High Alkalinity Shallow/ Deep	HA/M-ShD	>4m	> 100 mg ^l ⁻¹ CaCO ₃

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