

Water for life and livelihoods

River Basin Management Plan Dee River Basin District

Annex B: Water body status objectives

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B.1 Introduction

This annex sets out the environmental objectives for each of the 115 water bodies in the Dee River Basin District. This information is presented in tables; one table for each water body. The annex is organised so that the tables are grouped by catchments. Groundwater, estuary and coastal water bodies and canals, surface water transfers and Sites of Special Scientific Interest (SSSI) ditches are grouped separately at a river basin district level.

In this annex we explain the reasoning behind the status objectives for each water body. You can find further information on how we considered and assessed the actions to meet the objectives in Annex E.

B.2 The objectives of the Water Framework Directive

The Water Framework Directive (WFD) sets a number of different objectives. In summary the environmental objectives for surface waters are:

- Prevent deterioration in status for water bodies
- Aim to achieve good ecological and good surface water chemical status in water bodies¹ by 2015
- For water bodies that are designated as artificial or heavily modified, aim to achieve good ecological potential by 2015
- Comply with objectives and standards for protected areas where relevant
- Reduce pollution from priority substances and cease discharges, emissions and losses of priority hazardous substances.

In summary the environmental objectives for groundwater are:

- Prevent deterioration in the status of groundwater bodies
- Aim to achieve good quantitative and good groundwater chemical status² by 2015 in all those bodies currently at poor status
- Implement actions to reverse any significant and sustained upward trends in pollutant concentrations in groundwater
- Comply with the objectives and standards for protected areas where relevant
- Prevent or limit the input of pollutants into groundwater.

Good status

The Directive sets a target of aiming to achieve at least 'good status' in all waters. For surface waters there are two separate classifications for water bodies; ecological and chemical. For a surface water body to be in overall 'good' status both ecological and chemical status must be at least 'good'. Ecological status is recorded on a scale high, good, moderate, poor and bad; chemical status is recorded as good or fail. If a water body is at less than good ecological status we also report how certain we are that the water body does not meet good status. For groundwater, there are also two separate classifications for water bodies; quantitative and chemical. For a groundwater water body to be in overall 'good' status, both quantitative and chemical status must be 'good'. Groundwater status is recorded as good or poor.

¹ Also known as 'good surface water status': Article 2.17.

² Also known as 'good groundwater status': Article 2.20.

Status is measured through a series of specific standards and targets that have been developed by the UK administrations, supported by the Water Framework Directive UK Technical Advisory Group (UKTAG; www.wfduk.org). You can find more information about how we monitored and classified water bodies in Annex A.

Artificial or heavily modified water bodies

Whilst good ecological status is defined as a slight variation from undisturbed natural conditions in natural water bodies, artificial and heavily modified water bodies are unable to achieve natural conditions. Instead, artificial and heavily modified water bodies have a target to achieve good ecological potential, which recognises their important uses, whilst making sure ecology is protected as far as possible. Ecological potential is also measured on the scale high, good, moderate, poor and bad. The chemical status of these water bodies is measured in the same way as for natural water bodies.

Protected Areas

The Directive specifies that areas requiring special protection under other EC Directives and waters used for the abstraction of drinking water are identified as protected areas. These areas have their own objectives and standards.

Article 4 of the Water Framework Directive requires Member States to achieve compliance with any standards and objectives set for each protected area by 22 December 2015, unless otherwise specified in the Community legislation under which the protected area was established. Where a protected area also has a surface water or groundwater objective the most stringent objective applies.

The objectives reported in this annex (B) are those related to Water Framework Directive water body status only. However, where a protected area coincides with a water body, this is indicated in the water body tables in this annex. The presence of a Site of Special Scientific Interest (SSSI), which is not also designated as a protected area (under the Birds Directive or Habitats Directive), is indicated in the water body tables.

It is not possible to link the water body status objectives in this annex with the protected area objectives in Annex D since the two sets of objectives are not always directly comparable. In addition, in some cases the size and scale of water bodies under the Water Framework Directive are not the same as waters identified as protected areas.

Some areas may require special protection under more than one EC Directive. In these cases, all of the appropriate objectives and standards must be achieved. More information about protected areas and their objectives and standards are shown in Annex D.

Prevent or limit

The Water Framework Directive and the new Groundwater Directive (2006/118/EC) extend the existing groundwater quality protection regime implemented via the current Groundwater Regulations. New Groundwater Regulations are expected during 2009 to incorporate the changes. Hazardous substances³ must be prevented from entry into groundwater and the entry into groundwater of all other pollutants must be limited to prevent pollution. A wider range of substances and activities are controlled under the new Directives and there are

³ Substances or groups of substances that are toxic, persistent and liable to bioaccumulate, and other substances or groups of substances which give rise to an equivalent level of concern.

fewer exemptions compared with the existing regime. The aim is to make the existing regime both more flexible and risk based but also more effective, in particular, in controlling diffuse pollution. Actions to prevent or limit the input into groundwater of pollutants are a high priority and can be viewed as a principal means of achieving all of the other groundwater quality objectives.

Implement measures to reverse significant and sustained upward trends

Actions to reverse any significant and sustained upward trends in pollutant concentrations in groundwater must be implemented in the first river basin management planning cycle, or in later cycles as soon as a trend has been identified. It is not possible to use a less stringent objective or extended deadline for this requirement.

Prevent deterioration in status and exceptions

Other than in very exceptional circumstances, the objective to prevent deterioration in status of a water body must always be met, for example, when the deterioration is caused by physical modifications. These new activities may change the physical characteristics of a surface water body, which may be the case in building new flood defences or the water level in a groundwater body, where a new public supply borehole is put into use. Even in these cases it is necessary to comply with a number of conditions before this derogation can be relied upon.

Water bodies where deterioration of status has been permitted under the terms of WFD Article 4(7)

One of the objectives of the Water Framework Directive is to ensure the status of rivers, lakes, estuaries, coastal waters and groundwater is protected from deterioration. This objective applies to all water bodies no matter what their status. However, in specific circumstances, the Directive does provide for exemptions or reasons why this objective should not be applied. Although protecting the water environment is a priority, some new modifications may provide important benefits to human health, human safety and/or sustainable development.

Such benefits can include:

- public water supply;
- flood defence/alleviation;
- hydropower generation;
- navigation.

It is sometimes not possible to undertake such activities without causing deterioration of status to the water body, or preventing the water body from reaching its environmental objectives. The benefits such developments can bring need to be balanced against the social and economic benefits gained by maintaining the status of the water body.

No developments occurring between 1st December 2006 and 31st March 2009 were identified as likely to cause deterioration in the ecological status or potential of water bodies within the Dee River Basin District.

B.3 Catchments in the Dee River Basin District

You can use the sections below to find information on the management catchments within the Dee River Basin District, these are river catchments, groundwater, estuaries, coastal catchments, canals, surface water transfers and Sites of Special Scientific Interest (SSSI) ditches. The locations of the river management catchments are shown in Figure B.3.1.

- B.5 Upper Dee river catchment
- B.6 Middle Dee river catchment
- B.7 Tidal Dee river catchment
- B.8 Groundwater
- B.9 Estuaries and Coastal Waters
- B.10 Canals, surface water transfers and SSSI ditches

Each river catchment section contains:

- a map showing the river and lake water bodies within the catchment;
- a table summarising status objectives across the catchment;
- tables, one per water body, detailing current status and objectives.

The groundwater, estuaries and coastal waters and canals, surface water transfer and SSSI ditches sections each contain:

- a map showing the relevant water bodies within the river basin district;
- tables, one per water body, detailing current status and objectives.

Figure B.3.1 Dee River Basin District and river catchment divisions



The status objectives, by water body type, for the Dee River Basin District are summarised in Figure B.3.2 below.

Figure B.3.2 **Status objectives for water bodies in the Dee River Basin District**

Status objectives for water bodies in the Dee River Basin District						
Water body category	Good or high now	Good or high in 2015	Good or high in 2021	Good or high in 2027	Less than good in 2015	Total number of water bodies
Overall						
Rivers	22	31	31	87	56	87
Lakes	9	9	9	21	12	21
Estuaries	0	0	0	1	1	1
Groundwater	4	4	4	6	2	6
Natural						
Rivers	17	22	22	56	34	56
Lakes	3	3	3	4	1	4
Estuaries	0	0	0	0	0	0
Groundwater	4	4	4	6	2	6
Artificial/Heavily modified water bodies						
HMWB	10	14	14	48	34	48
AWB	1	1	1	1	0	1

You can look at the information in this annex in another way through the 'What's in your backyard?' (WIYBY) feature on our website. This allows you to search by place name or postcode to get the details of an individual water body. Link through www.environment-agency.gov.uk/WIYBY. This will be available in early 2010 following publication of this plan.

B.4 Water body tables explained

Figures B.4.1. to B.4.4 below (and the supporting 'explanatory notes' which follow) provide explanations of the information included in the water body tables.

Figure B 4.1 **Surface water body tables explained – part 1**

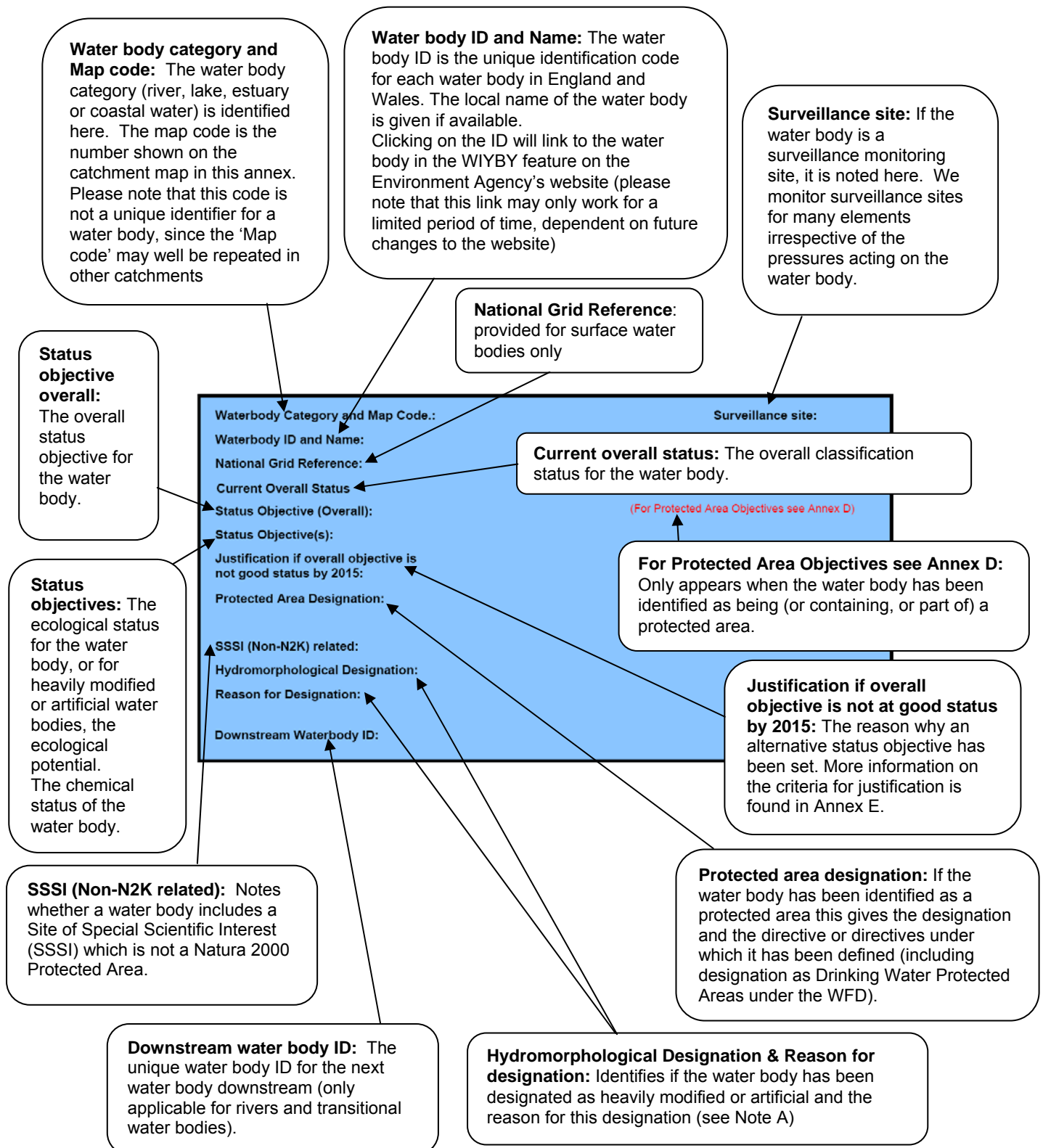


Figure B 4.2. Surface water body tables explained – part 2

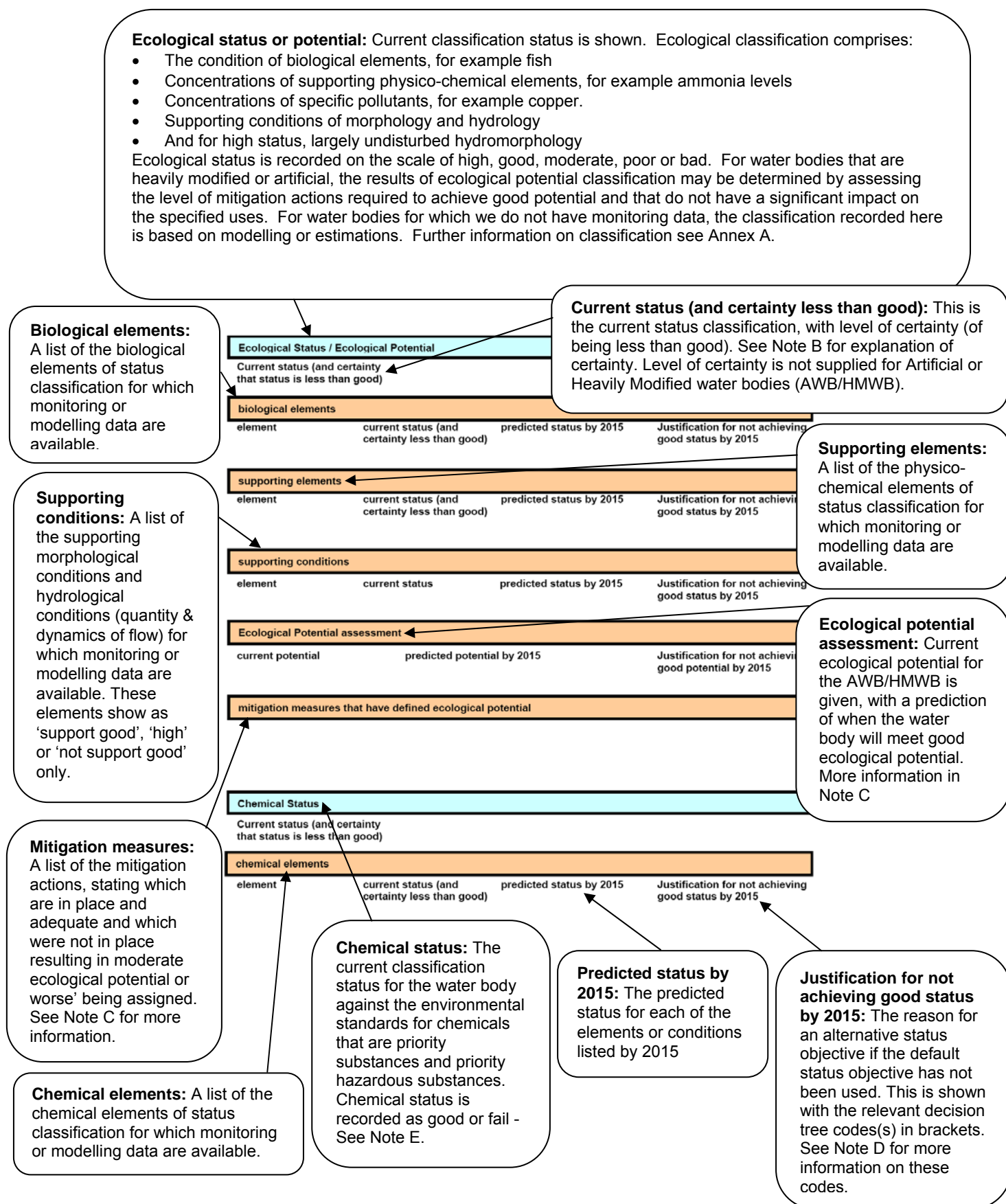


Figure B. 4.3 **Groundwater body tables explained part 1**

Descriptions are the same as surface water bodies except where stated.

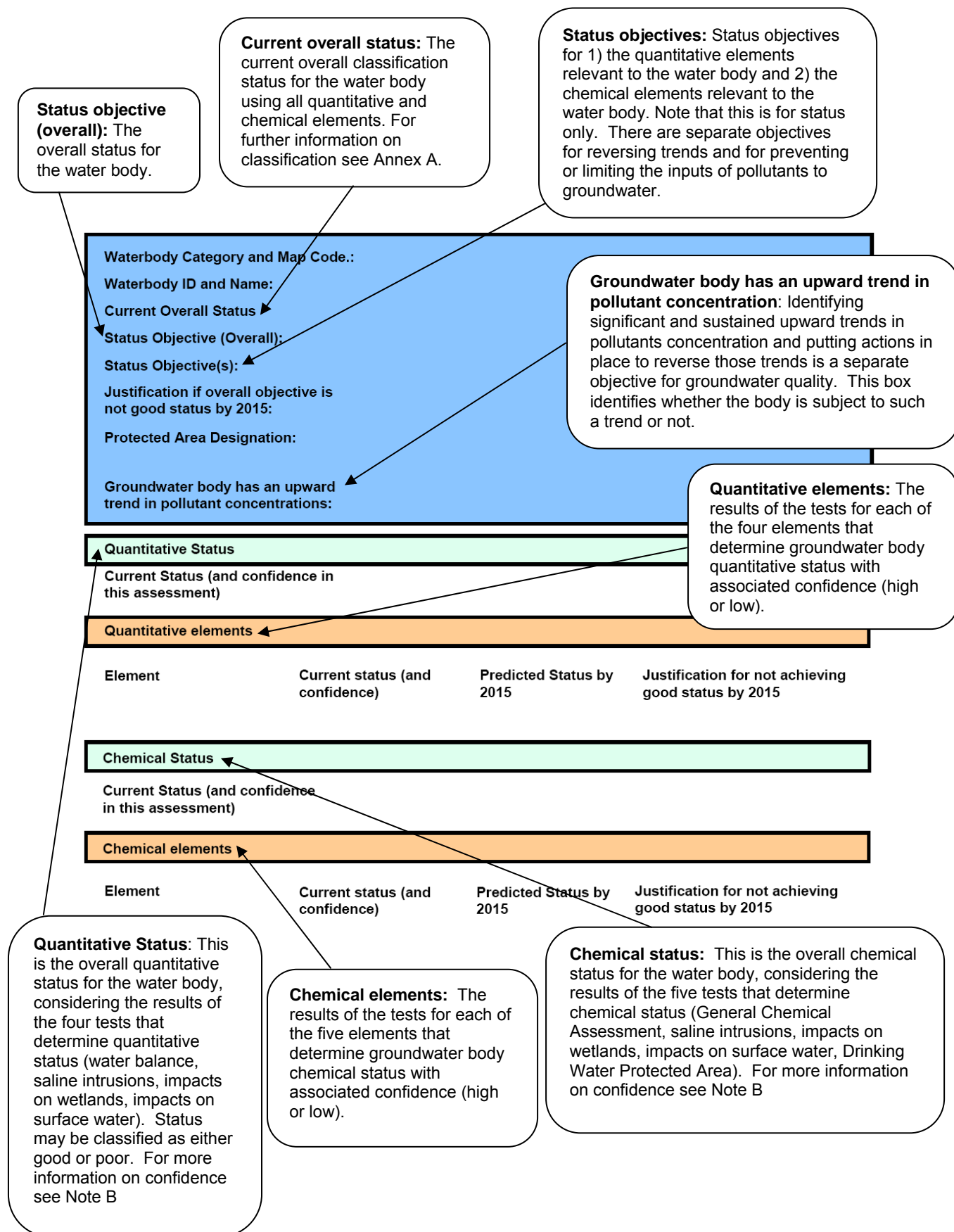
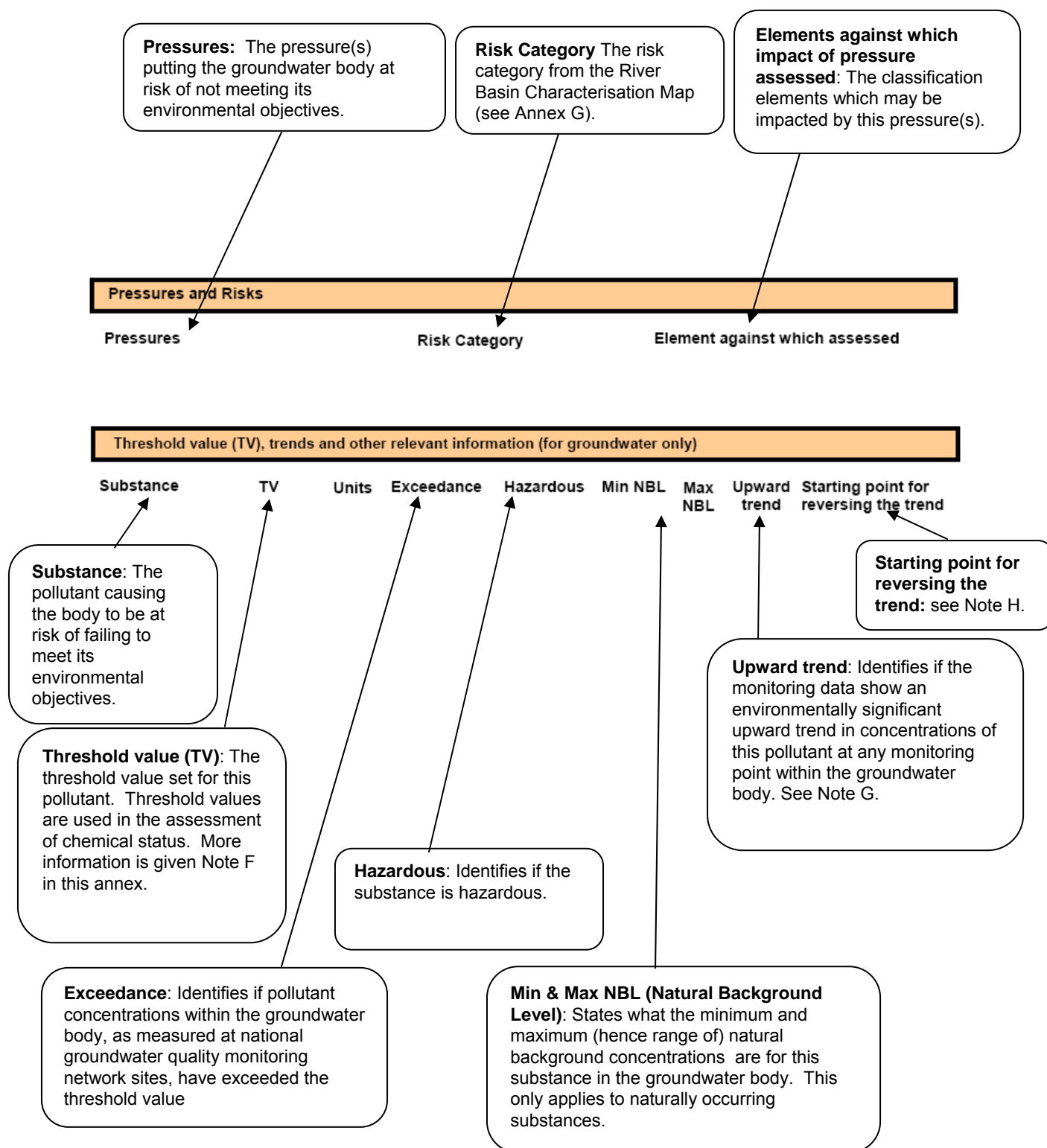


Figure B. 4.4 Groundwater tables explained - part 2



Explanatory notes

Note A: Hydromorphological Designation & Reason for designation

These fields in the water body tables identify whether the water body has been designated as being heavily modified or artificial for one or more of the following reasons (see also Annex I): Drinking Water; Flood Protection; Irrigation; Land Drainage; Navigation; Other; Power Generation; Recreation; Structure; Urbanisation; Wider Environment; Water Regulation (impoundment release); Water Regulation (strategic transfer); Water Storage - non-specific; Coastal Protection; Shell Fisheries; Fin Fisheries; Dredge Disposal.

Note B: Certainty and confidence

Surface waters

Our assessments of surface water body status are accompanied by a description of how certain we can be that the water body is below good status⁴. These assessments are reported in this annex for each quality element in each water body, and for the overall water body status.

The Environment Agency has used three expressions to describe how certain we are that a water body does not achieve the objective of good status. Although the terms confidence and certainty can be interchangeable, the Environment Agency has taken the decision to use an expression of certainty to describe all surface water classifications.

How certain we are that the water body is less than good status	Threshold
Very certain	≥95% certain that the water body does not meet the objective of good status
Quite certain	≥75to ≤95% certain that the water body does not meet the objective of good status
Uncertain	>50% to <75% certain that the water body does not meet the objective of good status

This description of certainty takes account of the precision of our results. Precision is influenced by natural variation in the data over time, as well as errors in the assessment process. The Environment Agency can assess how the probability of misclassification changes in relation to the amount of sampling for each biological element. This allows us to estimate the most likely levels of certainty we can achieve with a given sampling effort. For example, a diatom sample from spring and autumn will allow no more than a 70% certainty of being at a particular status, but often gives high certainty (>95%) of being somewhere below good status.

⁴ This does not apply to Artificial or Heavily Modified water bodies because the designation and classification processes included expert opinions provided by Environment Agency staff and external stakeholders. The information used was therefore partly qualitative and so it was not appropriate to assign an assessment of certainty.

In some situations our expression of certainty is based on weight of evidence or expert opinion. There are three examples of this:

- The way different water bodies respond to nutrient enrichment can be complicated. Sometimes we find that the water body does not meet the required standard for phosphorus but the biological community shows no sign of damage. In such situations it would be misleading to say we are very certain that the water body is at less than good status. In other situations, the water body does not meet the required standard for phosphorus, and the biological community – the diatoms and macrophytes – also show signs of damage. The result for each element on its own may be uncertain. But the fact that all elements suggest the same thing – weight of evidence that there is an impact – means that we become more certain that there is a problem. So we modify the overall certainty according to the statistical certainty of each test. Where this has happened it is indicated by “WoE” (weight of evidence) against the certainty rating.
- As our monitoring programme for estuarine and coastal water bodies is new, certainty in our draft classifications for these water bodies is partly based on the amount of data available for each of the classification tools. We say we are uncertain where our data sets are limited. Our marine monitoring programme will continue to provide more data, so the certainty of our assessments in estuarine and coastal waters should steadily improve over time.
- We don't yet have assessments for all of our water bodies. Where we lack data we have used expert judgements to provide an initial assessment of the water body (see Annex A for more detail) and this is stated in the water body tables as 'Note: Current Status and Status Objectives for this water body are based on Expert Judgement'. Where expert judgement has been used to provide a classification we can only ever be uncertain in our assessment.

Where a water body is Good or High Ecological Status and biology is not classified (i.e. no biology data was used) then this is indicated with 'no biology data'

Groundwater status

Groundwater classification comprises four quantitative and five chemical status tests. Each of the status test results is reported as a face value class accompanied by an assessment of our confidence in the result.

For groundwater, confidence is reported as a qualitative statement, and is used as an indicator for prioritising action. All poor status classifications for groundwater, irrespective of confidence, will require some form of action. This is because the classification criteria for both chemical and quantitative status comprise a rigorous weight of evidence approach. Further details of how confidence is determined are given in Annex A.

The decisions on which level of confidence to assign to each of the tests undertaken to determine status are reached by using a combination of statistical and weight of evidence criteria. The principles for this are outlined in the UK TAG paper 'Reporting Confidence in Groundwater Status Assessments' (available at http://www.wfduk.org/tag_guidance/Article_08/Groundwater_confidence).

As a principle guiding the assessment of confidence in each of the individual status tests, the key criteria are a) the strength of the overall “weight of evidence” supporting the status assessment and b) a combined assessment of the monitoring data in terms of the magnitude of overall departure from the poor/good status boundary and the variability of the data.

Confidence in chemical status and quantitative status will be determined and reported separately. For poor status groundwater bodies, the highest level of confidence from each of

the individual tests should be reported. For good status groundwater bodies, the lowest level of confidence from each of the individual tests should be reported.

Note C: Explanation of hydromorphological measures

The assessment of ecological potential looks at mitigation measures which relate to hydromorphological pressures and ecological impacts that are present in Artificial and Heavily Modified water bodies (AWB/HMWBs).

Each AWB/HMWB is designated for at least one use. Please see 'reason for designation' in the water body objective tables. For each of these water body uses we have defined a number of associated mitigation measures that are required to reduce the hydromorphological impacts of the use. This is in line with the UK TAG guidance which can be found at: www.wfduk.org/st_workshops/LibraryPublicDocs/gep_hmwb_final

For a water body to reach GEP all the associated mitigation measures need to be in place. For each AWB/HMWB we reviewed, mitigation measures fit into one of these categories:

- **in place** for the water body in question and operating adequately OR
- **not applicable** to that particular water body - some measures have been screened out during the assessment process because they could not be put in place without significantly adversely affecting the use of the water body or the wider environment, or they are not practicable given the physical characteristics of the water body. OR
- **are required** to reduce the hydromorphological impacts on ecology and to achieve good ecological potential or better.

In the water body objective tables in Annex B mitigation measures relating to ecological potential are listed for each AWB/HMWB as follows:

- a) mitigation measures that are in place and adequate are identified as "in place" and
- b) mitigation measures that are required to reach Good Ecological Potential or better are identified as "not in place".

Mitigation measures that are not applicable are not included in these tables.

In AWB/HMWBs currently classified as moderate ecological potential or worse for hydromorphological pressures there is at least one mitigation measure that is not currently in place or has not been screened out on the basis of practicability or impact on use or the wider environment.

It should be noted that mitigation measures identified as "not in place" is a comprehensive list of actions that could be adopted, rather than the final proposed actions. Further appraisal is required to relate these general measures to specific actions within a water body. Specific actions that will be occurring appear in Annex C.

We have appraised these mitigation measures, including:

- mapping these potential measures to existing Environment Agency plans (such as medium term flood risk management plans) and local schemes (see Annex E for explanation of mapping exercise)
- working with co-deliverers to identify options for implementing these measures, where it is their management and/or structures that contribute to the hydromorphological pressure/s
- assigned measures to a particular sector, where this is possible, and aligned where possible with any sectoral plans and processes

- taken account of comments received as part of the consultation process on the draft river basin management plans.

Some measures alone or in combination may only achieve a slight ecological improvement. In these cases the measures only contribute to maximum ecological potential. Where we are confident of this, the measure/s will not be required to achieve good ecological potential. Currently we are not able to predict slight ecological benefit satisfactorily, but as our understanding increases we will be able to assess the mitigation measures fully.

For AWB/HMWBs designated for water supply use and currently not achieving GEP, a programme of investigation in partnership with water companies is planned. This will enable us to identify appropriate and cost effective measures for implementation in the second and third River Basin Management Plans.

Note D: Decision trees codes

Decision tree codes have been used to indicate how we have made decisions about alternative objectives. Each pressure has a unique decision tree with a set of decision tree codes which are shown in the water body tables, for example S1a is from Sediments tree, P1a from the Phosphorus tree. These decision trees show the main steps taken in appraising the potential measures to address a pressure and set out which of those decisions can lead to the setting of an alternative objective. Further information on decision tree codes can be found in Annex E.

Note E: Chemical status reporting

An assessment of chemical status is required in water bodies where priority substances and other specific pollutants are known to be discharged in significant quantities. If a water body is labelled as "Does not require assessment" it is because these pollutants are not discharged into this water body in significant quantities.

The Water Framework Directive requires us to classify chemical status as either Good or Fail (i.e. failing to achieve good).

The Directive also requires us to produce an overall status assessment (and objective) for water bodies, inferring that we need to combine ecology and chemistry into one overall assessment. To do this, we convert our chemical status assessments using the following translation: Good = High, Fail = Moderate.

The translation of Good = High was agreed by UKTAG on the basis that it would be unfair to downgrade an otherwise pristine water body (one that reaches high for all other elements) simply because the chemical status can only ever achieve a maximum of Good.

Therefore, in our Annex B tables we report:

- the status of individual chemical elements as High or Moderate (so the translation described above can occur)
- the current chemical status as Good or Fail (as required by the Directive)

Note F: Summary of how exceedances of groundwater quality standards/threshold values at monitoring network sites have been used in the assessment of chemical status of groundwater bodies

The Groundwater Daughter Directive (GWDD) states that for assessing chemical status, we should use prescribed groundwater quality standards for nitrates and pesticides, and locally derived threshold values for other pollutants that have been identified as contributing to the characterisation of the groundwater bodies as being at risk of failing to meet one or more of its environmental objectives.

Threshold values are groundwater quality standards approved by Defra/Welsh Assembly Government (WAG) for the purpose of assessing groundwater chemical status. They can be set nationally, or on a local groundwater body scale. Threshold values are triggers that if exceeded at groundwater monitoring points require us to investigate whether the conditions for good status have been met. They do not represent the boundary between good and poor status. The EU (GWDD) groundwater quality standards prescribed for nitrate and pesticides have also been used in the assessment process in the same way. Note however that threshold values for these pollutants may be established at lower concentrations to ensure that all status objectives are being met. All this follows the requirements of the GWDD. Note that the groundwater monitoring points used for Water Framework Directive classification are those included in the Environment Agency's national groundwater quality monitoring programme.

If standards and/or threshold values are not exceeded at any of the relevant monitoring points within the groundwater body then, in accordance with the GWDD, the groundwater body is at good status and no further investigation is necessary. The standards and conditions that we apply to environmental permits should reflect the need to meet all Water Framework Directive objectives, including good chemical status, but these permit conditions are not threshold values.

Threshold values have been derived for each of the tests for good chemical status. Once each of the relevant tests for a groundwater body has been applied the individual tests must then be assessed together, on a one-out all-out basis. The most stringent relevant threshold for each pollutant will be reported for the groundwater body. This indicates that the threshold will apply to at least one monitoring point within the groundwater body. Threshold values for a single substance could vary across a groundwater body, particularly for those substances where there is a highly variable natural background concentration. For simplicity, we have avoided this wherever possible, but it is needed in some cases.

The threshold value for each test is appropriate to the receptor being considered in that test, e.g. a groundwater abstraction, an associated surface water body, or a groundwater dependent terrestrial ecosystem. The way in which we have compared monitoring data to the threshold values during classification varies between the individual classification tests. See the table below.

If a threshold value has been exceeded, we have investigated whether the pollution is of sufficient magnitude to prevent the groundwater body achieving its status objectives under the Water Framework Directive (i.e. it is not just a localised impact). This has been undertaken, for example, using status assessments for surface ecosystems, assessments of loadings to surface receptors or aggregations of groundwater data.

Only where the concentration of pollutants exceeds the groundwater chemical threshold, and any supporting evidence confirms the presence of an impact that compromises the achievement of Water Framework Directive status objectives, have we classified the

groundwater body as at poor status. Where there was insufficient data to conduct a particular test, then in the absence of contrary information, the groundwater body has been assigned good status for that test, but with low confidence in this assessment. We will aim to undertake additional monitoring and/or investigation so that the test can be properly conducted at the next round of classification.

Status classification test	Where threshold value applies
Saline or other intrusions (where poor quality water has been pulled into the body as a result of groundwater abstraction)	Relevant individual monitoring points e.g. those in areas at risk from intrusion
Impact on Surface Water Bodies	Relevant individual monitoring points e.g. those close to the surface water body
Impact on Wetlands (groundwater dependent terrestrial ecosystems)	Relevant individual monitoring points e.g. those close to the wetland
Drinking Water Protected Areas	Relevant individual monitoring points e.g. those that are abstractions used for drinking water
General Chemical Assessment	Aggregated across the body, e.g. compared to groundwater body average concentration(s).

Note G: Summary of how groundwater body chemical trend assessment was carried out.

The Water Framework Directive and the Groundwater Daughter Directive require us to identify statistically and environmentally significant upward pollutant trends in groundwater bodies. This section describes the procedure we used to carry out this assessment.

1. We collated groundwater quality monitoring data using data between 1997 and 2007. The data came from both our National Groundwater Quality Monitoring Network and water company monitoring where this was made available.
2. We used a simple modelling tool to calculate whether these data showed a statistically significant upward trend. The tool was specifically designed and developed for this purpose, and uses two different statistical tests to assess trends in the data. If a statistically significant trend was detected the tool also predicted the expected pollutant concentration in 2021.
3. We then assessed the environmental significance of each of the significant upward trends. This was done by comparing the predicted pollutant concentration in 2021 to the threshold value(s) for the relevant groundwater body chemical classification test. A trend is environmentally significant if the predicted concentration in 2021 is greater than one or more threshold values. Threshold values are explained in Note E.

A map showing which groundwater bodies have statistically and environmentally significant trends can be seen in Annex A.

Note H: Starting point for reversing the trend

This is the pollutant concentration measured in the groundwater body at which we must implement actions to reverse upward trends. The default is 75% of the threshold value, unless we can justify a later starting point (because the rise in concentrations is low and there is less risk to the environment) or an earlier starting point (because the risk to the environment is high).

B.5 Upper Dee river catchment

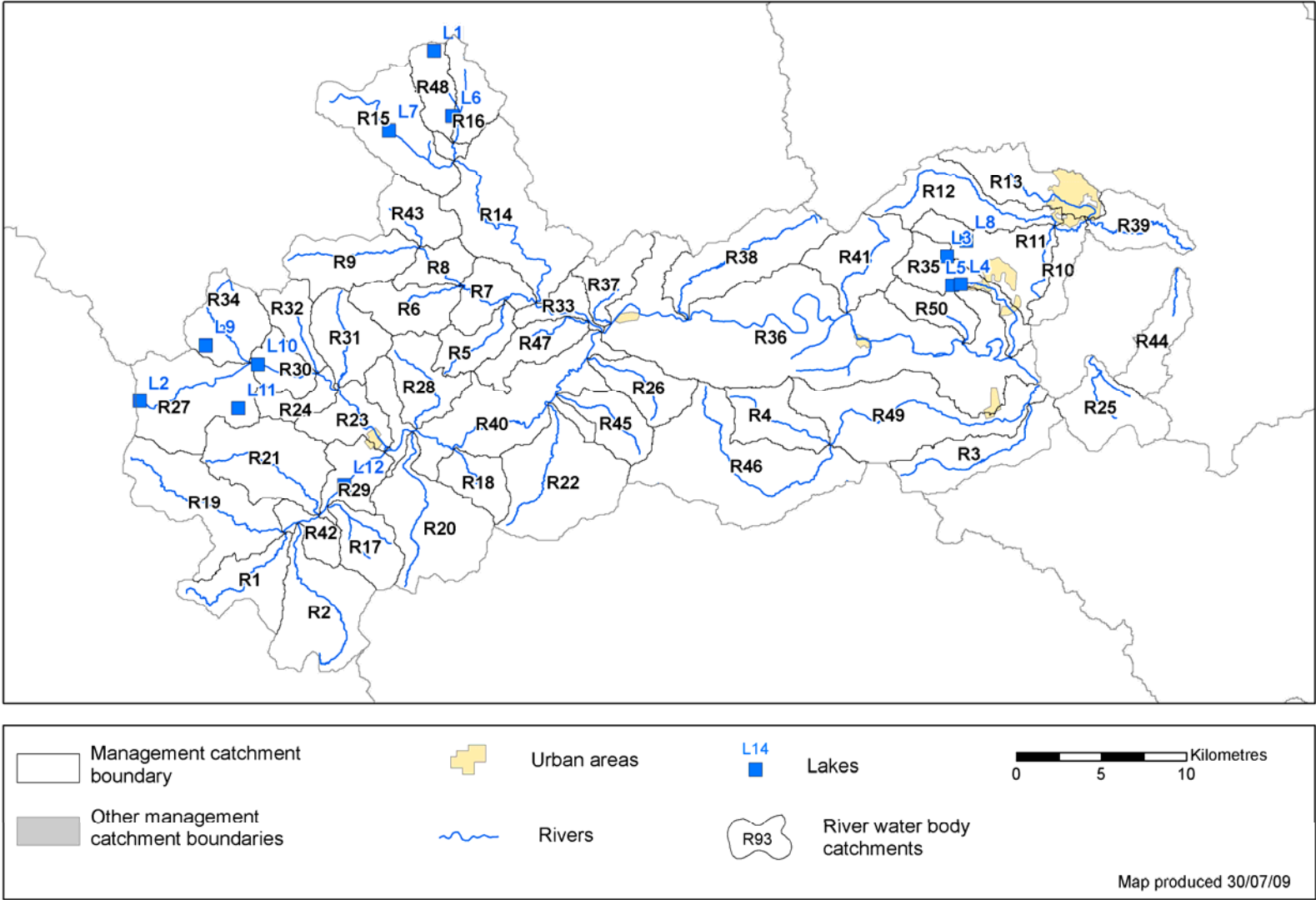
Rivers and lakes

There are 50 river water bodies (of which 16 are designated as heavily modified) and 12 lake water bodies (of which 10 are designated as heavily modified) within the Upper Dee river catchment.

Figure B.5.1 **Status objectives for rivers and lakes in the Upper Dee river catchment**

Status objectives for rivers and lakes in the Upper Dee river catchment						
Water body category	Good or high now	Good or high in 2015	Good or high in 2021	Good or high in 2027	Less than good in 2015	Total number of water bodies
Natural						
Rivers	15	18	18	34	16	34
Lakes	2	2	2	2	0	2
Artificial/Heavily modified water bodies						
HMWB	8	12	12	26	14	26
AWB	0	0	0	0	0	0

Figure B.5.2 River and lake water bodies in the Upper Dee river catchment



Water body tables for rivers and lakes in the Upper Dee catchment

This section contains detailed information on the current status and objectives for river and lake water bodies in the catchment. The tables are arranged by water body type (in the order rivers then lakes) and by map code number within these groupings.

Note: In the following water body tables, only the relevant elements of the status objectives (shown under the orange sub headings) are shown.

Waterbody Category and Map Code.:	River - R1	Surveillance site:	No
Waterbody ID and Name:	GB111067046410	Dee - above Afon Lliw	
National Grid Reference:	SH 84949 27303		
Current Overall Status	Moderate		
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)	
Status Objective(s):	Good Ecological Status by 2027		
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)		
SSSI (Non-N2K) related:	No		
Hydromorphological Designation:	Not Designated A/HMWB		
Reason for Designation:			
Downstream Waterbody ID:	GB111067051830		

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Uncertain)	Moderate	Disproportionately expensive (B1a), Technically infeasible (B2a)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	Good	Good	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R2	Surveillance site:	No
Waterbody ID and Name:	GB111067046420	Twrch	
National Grid Reference:	SH 89662 26888		
Current Overall Status	Poor		
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)	
Status Objective(s):	Good Ecological Status by 2027, Good Chemical Status by 2015		
Justification if overall objective is not good status by 2015:	Technically infeasible		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)		
SSSI (Non-N2K) related:	No		
Hydromorphological Designation:	Not Designated A/HMWB		
Reason for Designation:			
Downstream Waterbody ID:	GB111067051830		

Ecological Status

Current Status (and certainty that status is less than good) Poor (Quite Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Poor (Quite Certain)	Poor	Technically infeasible (B2a)
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	Moderate (Quite Certain)	High	
Cypermethrin	High	High	
Diazinon	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Good

Chemical elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Chlorfenvinphos	High	High	

Waterbody Category and Map Code.:	River - R3	Surveillance site: No
Waterbody ID and Name:	GB111067051600	Morlas Brook
National Grid Reference:	SJ 25911 34889	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051910	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Good	Good	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Does not Support Good (Uncertain)	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R4	Surveillance site: No
Waterbody ID and Name:	GB111067051620	Teirw
National Grid Reference:	SJ 16457 37206	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051910	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Uncertain)	Moderate	Disproportionately expensive (B1a)
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	Moderate (Uncertain)	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R5	Surveillance site: No
Waterbody ID and Name:	GB111067051640	Merddwr (Dee)
National Grid Reference:	SH 99191 42032	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Not Designated	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051660	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R6	Surveillance site: No
Waterbody ID and Name:	GB111067051650	Medrad
National Grid Reference:	SH 95941 44824	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051660	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	Good	Good	
Copper	Moderate (Very Certain)	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R7	Surveillance site: No
Waterbody ID and Name:	GB111067051660	Ceirw - Alwen to Medrad
National Grid Reference:	SH 99719 44152	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052020	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R8	Surveillance site: No
Waterbody ID and Name:	GB111067051670	Ceirw - Medrad to Nug
National Grid Reference:	SH 96370 46034	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051660	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	Moderate (Very Certain)	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R9	Surveillance site: No
Waterbody ID and Name:	GB111067051680	Ceirw - above Nug
National Grid Reference:	SH 91517 47042	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051670	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R10	Surveillance site: No
Waterbody ID and Name:	GB111067051690	Clywedog - Gwenfro to Black Brook
National Grid Reference:	SJ 33860 48511	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052110	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Does not Support Good (Uncertain)	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R11	Surveillance site: No
Waterbody ID and Name:	GB111067051700	Black Brook
National Grid Reference:	SJ 32147 46545	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051690	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R12	Surveillance site: Yes
Waterbody ID and Name:	GB111067051720	Clywedog - above Black Brook
National Grid Reference:	SJ 27766 51405	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051690	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Quite Certain)	Moderate	Disproportionately expensive (M5a)
Invertebrates	Good	Good	
Macrophytes	Good	Good	
Phytobenthos	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Iron	High	High	
Zinc	Moderate (Very Certain)	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R13	Surveillance site: Yes
Waterbody ID and Name:	GB111067051730	Gwenfro
National Grid Reference:	SJ 32525 50492	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Not Designated	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052110	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain - WoE)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	Moderate (Quite Certain)	Moderate	Technically infeasible (B2a)
Macrophytes	Moderate (Quite Certain)	Moderate	Technically infeasible (B2a, B2r)
Phytobenthos	Moderate (Quite Certain)	Moderate	Technically infeasible (B2a, B2r)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R14	Surveillance site: No
Waterbody ID and Name:	GB111067051750	Alwen - Ceirw to Brenig
National Grid Reference:	SJ 01577 46964	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:	GB111067051660	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Uncertain)	Moderate	Not Required (MS)
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	Moderate (Very Certain)	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3d)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Ensure that the thermal regime in waters downstream of the impounding works is consistent with good status conditions.	Not In Place
Ensure that good status of dissolved oxygen levels is being achieved downstream of the impounding works	Not In Place
Provide flows to move sediment downstream.	Not In Place
Ensure there is an appropriate baseline flow regime downstream of the impoundment.	Not In Place
Maintain sediment management regime to avoid degradation of the natural habitat characteristics of the downstream river.	Not In Place
Re-engineering of the river where the flow regime cannot be modified.	Not In Place

Chemical Status

Current Status (and certainty that status is less than good)	Does not require assessment
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Waterbody Category and Map Code.:	River - R15	Surveillance site: No
Waterbody ID and Name:	GB111067051760	Alwen - above Afon Brenig
National Grid Reference:	SH 92806 55530	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Drinking Water Protected Area, Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:	GB111067051750	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Quite Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	Moderate (Uncertain)	Moderate	Disproportionately expensive (PH1a)
Phosphate	High	High	
Temperature	High	High	
Copper	Moderate (Quite Certain)	High	
Zinc	Moderate (Quite Certain)	High	
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3d)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Ensure that the thermal regime in waters downstream of the impounding works is consistent with good status conditions.	Not In Place
Ensure that good status of dissolved oxygen levels is being achieved downstream of the impounding works	Not In Place
Provide flows to move sediment downstream.	Not In Place
Ensure there is an appropriate baseline flow regime downstream of the impoundment.	Not In Place
Maintain sediment management regime to avoid degradation of the natural habitat characteristics of the downstream river.	Not In Place
Re-engineering of the river where the flow regime cannot be modified.	Not In Place

Chemical Status

Current Status (and certainty that status is less than good)	Does not require assessment
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Waterbody Category and Map Code.:	River - R16	Surveillance site: No
Waterbody ID and Name:	GB111067051790	Brenig - east of Brenig reservoir
National Grid Reference:	SH 97496 53921	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Drinking Water, Power Generation, Water Regulation (impoundment release), Water Regulation (strategic transfer), Water Storage -	
Downstream Waterbody ID:	GB111067051740	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	Moderate (Uncertain)	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3d)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Ensure that the thermal regime in waters downstream of the impounding works is consistent with good status conditions.	Not In Place
Ensure that good status of dissolved oxygen levels is being achieved downstream of the impounding works	Not In Place
Provide flows to move sediment downstream.	Not In Place
Ensure there is an appropriate baseline flow regime downstream of the impoundment.	Not In Place
Maintain sediment management regime to avoid degradation of the natural habitat characteristics of the downstream river.	Not In Place
Re-engineering of the river where the flow regime cannot be modified.	Not In Place

Chemical Status

Current Status (and certainty that status is less than good)	Does not require assessment
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Waterbody Category and Map Code.:	River - R17	Surveillance site: No
Waterbody ID and Name:	GB111067051820	Glyn
National Grid Reference:	SH 92522 30875	
Current Overall Status	Poor	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051970	

Ecological Status

Current Status (and certainty that status is less than good) Poor (Quite Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Poor (Quite Certain)	Poor	Technically infeasible (B2a, B2p, S2c)
Invertebrates	High	High	
Phytobenthos	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R18	Surveillance site: No
Waterbody ID and Name:	GB111067051840	Caletwr
National Grid Reference:	SH 98124 34595	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052240	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Quite Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Quite Certain)	Moderate	Technically infeasible (B2a)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R19	Surveillance site: Yes
Waterbody ID and Name:	GB111067051850	Lliw
National Grid Reference:	SH 81202 32838	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051830	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Quite Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Quite Certain)	Moderate	Disproportionately expensive (PH1a), Technically infeasible (B2a, S2c)
Invertebrates	Good	Good	
Macrophytes	High	High	
Phytobenthos	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	Moderate (Uncertain)	Moderate	Disproportionately expensive (PH1a)
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R20	Surveillance site: No
Waterbody ID and Name:	GB111067051860	Hirnant
National Grid Reference:	SH 94975 33974	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052240	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R21	Surveillance site: No
Waterbody ID and Name:	GB111067051870	Llafar
National Grid Reference:	SH 86914 34577	
Current Overall Status	Poor	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027, Good Chemical Status by 2015	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051970	

Ecological Status

Current Status (and certainty that status is less than good) Poor (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Poor (Very Certain)	Moderate	Technically infeasible (B2a)
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	Moderate (Very Certain)	High	
Cypermethrin	High	High	
Diazinon	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Good

Chemical elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Chlorfenvinphos	High	High	

Waterbody Category and Map Code.:	River - R22	Surveillance site: No
Waterbody ID and Name:	GB111067051880	Ceidiog
National Grid Reference:	SJ 03389 36194	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052240	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R23	Surveillance site: No
Waterbody ID and Name:	GB111067051900	Tryweryn - Dee to Mynach
National Grid Reference:	SH 92517 36896	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:	GB111067052240	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Quite Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	Moderate (Quite Certain)	High	
Zinc	Moderate (Quite Certain)	High	
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R24	Surveillance site: No
Waterbody ID and Name:	GB111067051920	Tryweryn - Mynach to Hesgin
National Grid Reference:	SH 89963 39692	
Current Overall Potential	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:	GB111067051900	

Ecological Potential (note: no biology data)

Current Status (and certainty that status is less than good) Good

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R25	Surveillance site: No
Waterbody ID and Name:	GB111067051930	Shell Brook
National Grid Reference:	SJ 35205 38653	
Current Overall Status	Poor	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive), Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067057080	

Ecological Status

Current Status (and certainty that status is less than good) Poor (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Poor (Very Certain)	Poor	Disproportionately expensive (P1a)
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Good	Good	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Moderate (Very Certain)	Moderate	Disproportionately expensive (P1a)
Temperature	High	High	
Arsenic	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Does not Support Good (Uncertain)	Does not Support Good	Disproportionately expensive (HR2a)
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R26	Surveillance site: No
Waterbody ID and Name:	GB111067051940	Trystion
National Grid Reference:	SJ 08687 39604	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Power Generation, Water Regulation (impoundment release), Water Storage - non-specific	
Downstream Waterbody ID:	GB111067052240	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Quite Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Quite Certain)	Moderate	Not Required (MS)
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	Moderate (Quite Certain)	High	
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R27	Surveillance site:	No
Waterbody ID and Name:	GB111067051950	Tryweryn - Llyn Celyn to Llyn Treweryn Inlet	
National Grid Reference:	SH 81515 39287		
Current Overall Status	Moderate		
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)	
Status Objective(s):	Good Ecological Status by 2027		
Justification if overall objective is not good status by 2015:	Technically infeasible		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)		
SSSI (Non-N2K) related:	No		
Hydromorphological Designation:	Not Designated A/HMWB		
Reason for Designation:			
Downstream Waterbody ID:	GB111067051980		

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	Moderate (Very Certain)	Moderate	Technically infeasible (PH3b)
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	Moderate (Quite Certain)	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R28	Surveillance site: No
Waterbody ID and Name:	GB111067051960	Meloch
National Grid Reference:	SH 96088 39367	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052240	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Quite Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	Moderate (Quite Certain)	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R29	Surveillance site: No
Waterbody ID and Name:	GB111067051970	Dee - outlet Bala Lake to inlet Bala Lake
National Grid Reference:	SH 91254 33827	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection, Water Storage - non-specific	
Downstream Waterbody ID:	GB111067052240	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	Moderate (Quite Certain)	Moderate	Not Required (MS)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	Good	Good	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Operational and structural changes to locks, sluices, weirs, beach control, etc	Not In Place
Structures or other mechanisms in place and managed to enable fish to access waters upstream and downstream of the impounding works.	Not In Place

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R30	Surveillance site:	No
Waterbody ID and Name:	GB111067051980	Tryweryn - Hesgin to Llyn Celyn	
National Grid Reference:	SH 87450 40122		
Current Overall Potential	Moderate		
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)	
Status Objective(s):	Good Ecological Potential by 2027		
Justification if overall objective is not good status by 2015:	Technically infeasible		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)		
SSSI (Non-N2K) related:	No		
Hydromorphological Designation:	Heavily Modified		
Reason for Designation:	Flood Protection, Water Storage - non-specific		
Downstream Waterbody ID:	GB111067051920		

Ecological Potential

Current Status (and certainty that status is less than good) Moderate

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Iron	High	High	
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Structures or other mechanisms in place and managed to enable fish to access waters upstream and downstream of the impounding works.	Not In Place
Preserve and, where possible, restore historic aquatic habitats	Not In Place

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R31	Surveillance site: No
Waterbody ID and Name:	GB111067051990	Mynach
National Grid Reference:	SH 91058 42367	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051900	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Uncertain)	Moderate	Disproportionately expensive (B1a), Technically infeasible (B2a)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	Moderate (Very Certain)	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R32	Surveillance site: No
Waterbody ID and Name:	GB111067052000	Hesgin
National Grid Reference:	SH 88564 41905	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:	GB111067051920	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3d)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Ensure that the thermal regime in waters downstream of the impounding works is consistent with good status conditions.	Not In Place
Ensure that good status of dissolved oxygen levels is being achieved downstream of the impounding works	Not In Place
Provide flows to move sediment downstream.	Not In Place
Maintain sediment management regime to avoid degradation of the natural habitat characteristics of the downstream river.	Not In Place

Chemical Status

Current Status (and certainty that status is less than good)	Does not require assessment
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Waterbody Category and Map Code.:	River - R33	Surveillance site: No
Waterbody ID and Name:	GB111067052020	Alwen - Dee to Ceirw
National Grid Reference:	SJ 04132 43610	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027, Good Chemical Status by 2015	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:	GB111067052060	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Arsenic	High	High	
Copper	Moderate (Very Certain)	High	
Iron	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3d)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Ensure that the thermal regime in waters downstream of the impounding works is consistent with good status conditions.	Not In Place
Ensure that good status of dissolved oxygen levels is being achieved downstream of the impounding works	Not In Place
Provide flows to move sediment downstream.	Not In Place
Ensure there is an appropriate baseline flow regime downstream of the impoundment.	Not In Place
Maintain sediment management regime to avoid degradation of the natural habitat characteristics of the downstream river.	Not In Place
Re-engineering of the river where the flow regime cannot be modified.	Not In Place

Chemical Status

Current Status (and certainty that status is less than good)	Good
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Chemical elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Benzo (a) and (k) fluoranthene	High	High	
Benzo (ghi) perelyene and indeno (123-cd) pyrene	High	High	
Benzo(a)pyrene	High	High	
Cadmium And Its Compounds	High	High	
Fluoranthene	High	High	
Lead And Its Compounds	High	High	
Mercury And Its Compounds	High	High	
Nickel And Its Compounds	High	High	
Aldrin, Dieldrin, Endrin & Isodrin	High	High	
para - para DDT	High	High	

Waterbody Category and Map Code.:	River - R34	Surveillance site: No
Waterbody ID and Name:	GB111067052030	Gelyn
National Grid Reference:	SH 83193 43167	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051980	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	Moderate (Quite Certain)	Moderate	Technically infeasible (PH3b)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	Moderate (Very Certain)	Moderate	Technically infeasible (PH3b)
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	Moderate (Quite Certain)	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R35	Surveillance site: No
Waterbody ID and Name:	GB111067052050	Eitha
National Grid Reference:	SJ 30479 43402	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:	GB111067052060	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Quite Certain)	Moderate	Not Required (MS)
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	Moderate (Very Certain)	High	
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R36	Surveillance site: Yes
Waterbody ID and Name:	GB111067052060	Dee - Ceiriog to Alwen
National Grid Reference:	SJ 14323 42856	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Drinking Water Protected Area, Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:	GB111067057080	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	Good	Good	
Macrophytes	Good	Good	
Phytobenthos	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	Moderate (Very Certain)	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R37	Surveillance site: Yes
Waterbody ID and Name:	GB111067052070	Camddwr
National Grid Reference:	SJ 05648 43869	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052060	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Uncertain)	Moderate	Technically infeasible (B2a)
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
Phosphate	High	High	
Temperature	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R38	Surveillance site: No
Waterbody ID and Name:	GB111067052100	Morwynion
National Grid Reference:	SJ 15729 48023	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052060	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	High	High	
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R39	Surveillance site: No
Waterbody ID and Name:	GB111067052110	Clywedog - Dee to Gwenfro
National Grid Reference:	SJ 38134 48674	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015, Good Chemical Status by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Drinking Water, Water Regulation (impoundment release)	
Downstream Waterbody ID:	GB111067057080	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Arsenic	High	High	
Copper	High	High	
Iron	High	High	
Phenol	High	High	
Zinc	Moderate (Very Certain)	High	
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Chemical Status

Current Status (and certainty that status is less than good) Fail (Very Certain)

Chemical elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Benzo (a) and (k) fluoranthene	High	High	
Benzo (ghi) perelyene and indeno (123-cd) pyrene	Moderate (Quite Certain)	Moderate	Technically infeasible (C2a)
Benzo(a)pyrene	High	High	
Cadmium And Its Compounds	Moderate (Very Certain)	Moderate	Technically infeasible (C2a)
Fluoranthene	High	High	
Lead And Its Compounds	High	High	
Mercury And Its Compounds	High	High	
Nickel And Its Compounds	High	High	
Aldrin, Dieldrin, Endrin & Isodrin	High	High	
para - para DDT	High	High	

Waterbody Category and Map Code.:	River - R40	Surveillance site:	No
Waterbody ID and Name:	GB111067052240	Dee - Alwen to Outlet Llyn Tegid/ Bala Lake	
National Grid Reference:	SH 97058 35739		
Current Overall Potential	Good		
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)	
Status Objective(s):	Good Ecological Potential by 2015, Good Chemical Status by 2015		
Justification if overall objective is not good status by 2015:			
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)		
SSSI (Non-N2K) related:	No		
Hydromorphological Designation:	Heavily Modified		
Reason for Designation:	Water Storage - non-specific		
Downstream Waterbody ID:	GB111067052060		

Ecological Potential

Current Status (and certainty that status is less than good) Good (Quite Certain - WoE)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Quite Certain)	Moderate	Not Required (MS)
Invertebrates	High	High	
Phytobenthos	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Arsenic	High	High	
Copper	High	High	
Iron	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Chemical Status

Current Status (and certainty that status is less than good) Good

Chemical elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Benzo (a) and (k) fluoranthene	High	High	
Benzo (ghi) perelyene and indeno (123-cd) pyrene	High	High	
Benzo(a)pyrene	High	High	
Cadmium And Its Compounds	High	High	
Fluoranthene	High	High	
Lead And Its Compounds	High	High	
Mercury And Its Compounds	High	High	
Nickel And Its Compounds	High	High	
Aldrin, Dieldrin, Endrin & Isodrin	High	High	
para - para DDT	High	High	

Waterbody Category and Map Code.:	River - R41	Surveillance site: No
Waterbody ID and Name:	GB111067052080	Eglwyseg
National Grid Reference:	SJ 21716 46496	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052060	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R42	Surveillance site:	No
Waterbody ID and Name:	GB111067051830	Dee - Inlet Bala Lake to Afon Lliw	
National Grid Reference:	SH 88403 31332		
Current Overall Status	Good		
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)	
Status Objective(s):	Good Ecological Status by 2015		
Justification if overall objective is not good status by 2015:			
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)		
SSSI (Non-N2K) related:	No		
Hydromorphological Designation:	Not Designated A/HMWB		
Reason for Designation:			
Downstream Waterbody ID:	GB111067051970		

Ecological Status (note: no biology data)

Current Status (and certainty that status is less than good) Good

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	Good	Good	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R43	Surveillance site: No
Waterbody ID and Name:	GB111067051710	Nug
National Grid Reference:	SH 94934 48755	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive	
Protected Area Designation:	Not Designated	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051670	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Moderate (Very Certain)	Moderate	Disproportionately expensive (P1a)
Temperature	Good	Good	
Copper	Moderate (Very Certain)	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R44	Surveillance site: Yes
Waterbody ID and Name:	GB111067052040	Dungrey Brook
National Grid Reference:	SJ 39819 45021	
Current Overall Status	Poor	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067057080	

Ecological Status

Current Status (and certainty that status is less than good) Poor (Very Certain - WoE)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Poor (Very Certain)	Poor	Technically infeasible (B2a)
Macrophytes	Poor (Very Certain)	Poor	Technically infeasible (B2p, P2a)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Good	Good	
Dissolved Oxygen	Poor (Quite Certain)	Poor	Disproportionately expensive (DO1a)
pH	High	High	
Phosphate	Poor (Very Certain)	Poor	Technically infeasible (P2a)
Temperature	High	High	
Ammonia (Annex 8)	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R45	Surveillance site: No
Waterbody ID and Name:	GB111067051890	Llynor
National Grid Reference:	SJ 04998 38074	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052240	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R46	Surveillance site: No
Waterbody ID and Name:	GB111067051610	Ceiriog - upstream of Teirw
National Grid Reference:	SJ 14559 33637	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067051910	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R47	Surveillance site: No
Waterbody ID and Name:	GB111067051630	Ffrauer
National Grid Reference:	SJ 03682 42905	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Not Designated	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052020	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R48	Surveillance site: No
Waterbody ID and Name:	GB111067051780	Brenig - west of Brenig reservoir
National Grid Reference:	SH 97245 56301	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:	GB111067051790	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Uncertain)	Moderate	Not Required (MS)
Invertebrates	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3d)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Ensure that the thermal regime in waters downstream of the impounding works is consistent with good status conditions.	Not In Place
Ensure that good status of dissolved oxygen levels is being achieved downstream of the impounding works	Not In Place
Provide flows to move sediment downstream.	Not In Place
Ensure there is an appropriate baseline flow regime downstream of the impoundment.	Not In Place
Maintain sediment management regime to avoid degradation of the natural habitat characteristics of the downstream river.	Not In Place
Re-engineering of the river where the flow regime cannot be modified.	Not In Place

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R49	Surveillance site: No
Waterbody ID and Name:	GB111067051910	Ceiriog - confluence Dee to Teirw
National Grid Reference:	SJ 23428 38040	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive), Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067057080	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R50	Surveillance site: Yes
Waterbody ID and Name:	GB111067052010	Trefnant Brook
National Grid Reference:	SJ 26797 43236	
Current Overall Potential	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:	GB111067052060	

Ecological Potential

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	Lake - L1	Surveillance site: No
Waterbody ID and Name:	GB31133854	Llyn Bran
National Grid Reference:	SH 96211 59182	
Current Overall Potential	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Drinking Water Protected Area	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:		

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential (note: no biology data)

Current Status (and certainty that status is less than good)	Good
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Ecological Potential Assessment
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Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Chemical Status

Current Status (and certainty that status is less than good)	Does not require assessment
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Waterbody Category and Map Code.:	Lake - L2	Surveillance site: No
Waterbody ID and Name:	GB31134854	Llyn Tryweryn
National Grid Reference:	SH 78876 38484	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:		

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Macrophytes	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Dissolved Oxygen	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	Lake - L3	Surveillance site: No
Waterbody ID and Name:	GB31134377	Pant Glas
National Grid Reference:	SJ 26433 47046	
Current Overall Potential	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Drinking Water Protected Area	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Drinking Water, Water Storage - non-specific	
Downstream Waterbody ID:		

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential (note: no biology data)

Current Status (and certainty that status is less than good)	Good
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Ecological Potential Assessment
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Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Chemical Status

Current Status (and certainty that status is less than good)	Does not require assessment
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Waterbody Category and Map Code.:	Lake - L4	Surveillance site: No
Waterbody ID and Name:	GB31134451	Pencaye Bottom Reservoir
National Grid Reference:	SJ 27239 45369	
Current Overall Potential	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Drinking Water Protected Area	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Drinking Water, Water Storage - non-specific	
Downstream Waterbody ID:		

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential (note: no biology data)

Current Status (and certainty that status is less than good)	Good
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Ecological Potential Assessment
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Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Chemical Status

Current Status (and certainty that status is less than good)	Does not require assessment
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Waterbody Category and Map Code.:	Lake - L5	Surveillance site: No
Waterbody ID and Name:	GB31134454	Pencaye Top Reservoir
National Grid Reference:	SJ 26738 45300	
Current Overall Potential	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Drinking Water Protected Area	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Drinking Water	
Downstream Waterbody ID:		

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential (note: no biology data)

Current Status (and certainty that status is less than good)	Good
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Ecological Potential Assessment
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Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Chemical Status

Current Status (and certainty that status is less than good)	Does not require assessment
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Waterbody Category and Map Code.:	Lake - L6	Surveillance site: No
Waterbody ID and Name:	GB31133923	Llyn Brenig
National Grid Reference:	SH 97275 55312	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Drinking Water Protected Area, Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:		

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Uncertain - WoE)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Chironom Invertebrates	Moderate (Very Certain)	Moderate	Technically infeasible (B2a)
Phytoplankton	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Total Phosphorus	Moderate (Uncertain)	Moderate	Disproportionately expensive (P1b)
Copper	Moderate (Quite Certain)	High	
Zinc	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3d)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Ensure there is an appropriate baseline flow regime downstream of the impoundment.	Not In Place

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	Lake - L7	Surveillance site: No
Waterbody ID and Name:	GB31133976	Alwen Reservoir
National Grid Reference:	SH 93563 54494	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Drinking Water Protected Area, Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:		

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Uncertain - WoE)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Chironom Invertebrates	Good	Good	
Phytoplankton	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Total Phosphorus	Moderate (Very Certain)	Moderate	Disproportionately expensive (P1o)

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3d)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Ensure that the thermal regime in waters downstream of the impounding works is consistent with good status conditions.	Not In Place
Ensure that good status of dissolved oxygen levels is being achieved downstream of the impounding works	Not In Place
Provide flows to move sediment downstream.	Not In Place
Ensure there is an appropriate baseline flow regime downstream of the impoundment.	Not In Place
Enable access to relevant feeder-streams draining into the reservoir at appropriate times for spawning and migration.	Not In Place
Ensure the seasonal pattern of water levels during each year is managed so as to enable the establishment and retention of aquatic plant and animal communities in the shore zone of the impoundment.	Not In Place
Ensure the rate and range of any artificial drawdown is appropriately managed to maintain aquatic plant and animal communities in the shore zones of water storage and supply with gently shelving shore zones.	Not In Place
Maintain sediment management regime to avoid degradation of the natural habitat characteristics of the downstream river.	Not In Place
Management of the risk of fish entrainment in intakes for hydropower turbines or water resource purposes (or pumping stations) where there is downstream fish migration.	Not In Place
Structures or other mechanisms in place and managed to enable fish to access waters upstream and downstream of the impounding works.	Not In Place
Re-engineering of the river where the flow regime cannot be modified.	Not In Place

Chemical Status

Current Status (and certainty that status is less than good)

Does not require assessment

Waterbody Category and Map Code.:	Lake - L8	Surveillance site: No
Waterbody ID and Name:	GB31134331	Ty Mawr Reservoir
National Grid Reference:	SJ 27563 47968	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Drinking Water Protected Area	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:		

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential

Current Status (and certainty that status is less than good) Moderate

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3d)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Ensure the seasonal pattern of water levels during each year is managed so as to enable the establishment and retention of aquatic plant and animal communities in the shore zone of the impoundment.	Not In Place
Ensure the rate and range of any artificial drawdown is appropriately managed to maintain aquatic plant and animal communities in the shore zones of water storage and supply with gently shelving shore zones.	Not In Place

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	Lake - L9	Surveillance site: No
Waterbody ID and Name:	GB31134633	Llyn Arenig Fach
National Grid Reference:	SH 82768 41767	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:		

Ecological Status (note: no biology data)

Current Status (and certainty that status is less than good) Good

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Dissolved Oxygen	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	Lake - L10	Surveillance site: No
Waterbody ID and Name:	GB31134644	Llyn Celyn
National Grid Reference:	SH 85838 40668	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Drinking Water Protected Area, Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection, Water Storage - non-specific	
Downstream Waterbody ID:		

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Uncertain - WoE)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Chironom Invertebrates	Good	Good	
Phytoplankton	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Total Phosphorus	Moderate (Very Certain)	Moderate	Disproportionately expensive (P1o)

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Ensure there is an appropriate baseline flow regime downstream of the impoundment.	In Place
Structures or other mechanisms in place and managed to enable fish to access waters upstream and downstream of the impounding works.	Not In Place

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	Lake - L11	Surveillance site: No
Waterbody ID and Name:	GB31134864	Llyn Arenig fawr
National Grid Reference:	SH 84689 38061	
Current Overall Potential	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Drinking Water Protected Area, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:		

Ecological Potential

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Phytoplankton	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Acid Neutralising Capacity	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Ensure there is an appropriate baseline flow regime downstream of the impoundment.	In Place

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	Lake - L12	Surveillance site: Yes
Waterbody ID and Name:	GB31134987	Llyn Tegid or Bala Lake
National Grid Reference:	SH 90917 33515	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection, Water Storage - non-specific	
Downstream Waterbody ID:		

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Uncertain - WoE)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
littoral Invertebrates	High	High	
Macrophytes	Moderate (Very Certain)	Moderate	Not Required (MS)
Phytobenthos	Good	Good	
Phytoplankton	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Acid Neutralising Capacity	High	High	
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	Good	Good	
Total Phosphorus	Moderate (Very Certain)	Moderate	Disproportionately expensive (P1o)
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Enable access to relevant feeder-streams draining into the reservoir at appropriate times for spawning and migration.	In Place
Where structures or other mechanisms are in place to enable fish to access waters upstream of the impounding works, the volume and timing of flow releases is sufficient to enable and, where relevant, trigger fish migration.	In Place
Operational and structural changes to locks, sluices, weirs, beach control, etc	Not In Place
Structures or other mechanisms in place and managed to enable fish to access waters upstream and downstream of the impounding works.	Not In Place

Chemical Status

Current Status (and certainty that status is less than good)	Does not require assessment
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B.6 Middle Dee river catchment

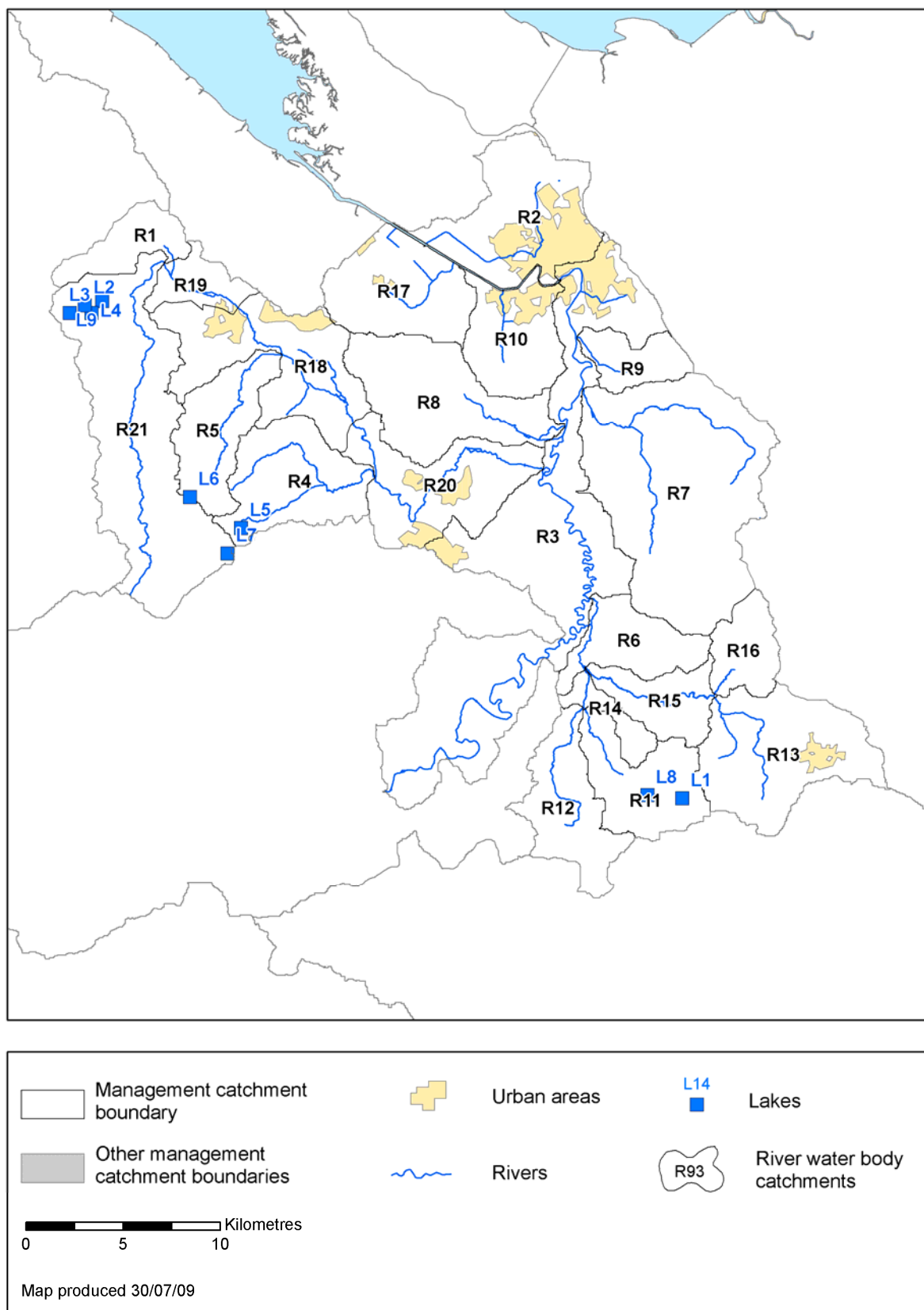
Rivers and lakes

There are 21 river water bodies (of which 8 are designated as heavily modified) and 9 lake water bodies (of which 7 are designated as heavily modified) within the Middle Dee river catchment.

Figure B.6.1 **Status objectives for rivers and lakes in the Middle Dee river catchment**

Status objectives for rivers and lakes in the Middle Dee river catchment						
Water body category	Good or high now	Good or high in 2015	Good or high in 2021	Good or high in 2027	Less than good in 2015	Total number of water bodies
Natural						
Rivers	0	1	1	13	12	13
Lakes	1	1	1	2	1	2
Artificial/Heavily modified water bodies						
HMWB	1	1	1	15	14	15
AWB	0	0	0	0	0	0

Figure B.6.2 River and lake water bodies in the Middle Dee river catchment



Water body tables for rivers and lakes in the Middle Dee catchment

This section contains detailed information on the current status and objectives for river and lake water bodies in the catchment. The tables are arranged by water body type (in the order rivers then lakes) and by map code number within these groupings.

Note: In the following water body tables, only the relevant elements of the status objectives (shown under the orange sub headings) are shown.

Waterbody Category and Map Code.:	River - R1	Surveillance site: No
Waterbody ID and Name:	GB111067056870	Dolfechlas Brook
National Grid Reference:	SJ 20868 66885	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	
Status Objective(s):	Good Ecological Status by 2027, Good Chemical Status by 2015	
Justification if overall objective is not good status by 2015:	Disproportionately expensive	
Protected Area Designation:	Not Designated	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052171	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
Phosphate	Poor (Very Certain)	Poor	Disproportionately expensive (P1a)
Temperature	High	High	
Copper	High	High	
Iron	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Good

Chemical elements			
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Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Cadmium And Its Compounds	High	High	
Lead And Its Compounds	High	High	

Waterbody Category and Map Code.:	River - R2	Surveillance site: No
Waterbody ID and Name:	GB111067056930	Finchetts Gutter
National Grid Reference:	SJ 38462 67194	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive), Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection	
Downstream Waterbody ID:	GB531106708200	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Poor (Very Certain)	Poor	Disproportionately expensive (A1b)
Dissolved Oxygen	Poor (Quite Certain)	Poor	Disproportionately expensive (DO1a)
pH	High	High	
Phosphate	Poor (Very Certain)	Poor	Disproportionately expensive (P1a)
Temperature	High	High	
Arsenic	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	Poor (Very Certain)	Poor	Disproportionately expensive (A1b)

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Appropriate timing (vegetation control)	Not In Place

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R3	Surveillance site: Yes
Waterbody ID and Name:	GB111067057080	Dee - Chester Weir to Ceiriog
National Grid Reference:	SJ 42296 51420	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027, Good Chemical Status by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Drinking Water Protected Area, Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive), Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Drinking Water, Flood Protection, Water Regulation (impoundment release), Water Regulation (strategic transfer)	
Downstream Waterbody ID:	GB531106708200	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	Moderate (Quite Certain)	Moderate	Not Required (MS)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Good	Good	
Temperature	Good	Good	
Arsenic	High	High	
Copper	High	High	
Iron	High	High	
Phenol	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Appropriate timing (vegetation control)	In Place
Appropriate vegetation control technique	In Place
Selective vegetation control regime	In Place
Flood bunds (earth banks, in place of floodwalls)	In Place
Structures or other mechanisms in place and managed to enable fish to access waters upstream and downstream of the impounding works.	Not In Place

Chemical Status

Current Status (and certainty that status is less than good)	Fail (Uncertain)
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Chemical elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Atrazine	High	High	Technically infeasible (C2a)
Benzo (a) and (k) fluoranthene	High	High	
Benzo (ghi) perelyene and indeno (123-cd) pyrene	Moderate (Uncertain)	Moderate	
Benzo(a)pyrene	High	High	
Cadmium And Its Compounds	High	High	
Fluoranthene	High	High	
Lead And Its Compounds	High	High	
Mercury And Its Compounds	High	High	
Nickel And Its Compounds	High	High	
Simazine	High	High	
Tributyltin Compounds	High	High	
Trichloromethane	High	High	
Aldrin, Dieldrin, Endrin & Isodrin	High	High	
para - para DDT	High	High	

Waterbody Category and Map Code.:	River - R4	Surveillance site: No
Waterbody ID and Name:	GB111067051770	Cegidog
National Grid Reference:	SJ 26630 57182	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive	
Protected Area Designation:	Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052173	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Quite Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Quite Certain)	Moderate	Disproportionately expensive (M5a)
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Iron	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R5	Surveillance site: No
Waterbody ID and Name:	GB111067051800	Terrig
National Grid Reference:	SJ 24274 59356	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive	
Protected Area Designation:	Not Designated	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052172	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Quite Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Quite Certain)	Moderate	Disproportionately expensive (M5a)
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R6	Surveillance site: Yes
Waterbody ID and Name:	GB111067052090	Worthenbury Brook - lower
National Grid Reference:	SJ 42351 47683	
Current Overall Potential	Poor	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive), Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection	
Downstream Waterbody ID:	GB111067057080	

Ecological Potential

Current Status (and certainty that status is less than good) Poor (Very Certain - WoE)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Poor (Very Certain)	Poor	Not Required (MS)
Invertebrates	Good	Good	
Macrophytes	Poor (Very Certain)	Poor	Not Required (MS)
Phytobenthos	Poor (Very Certain)	Poor	Technically infeasible (P2b, S2b)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Good	Good	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Poor (Very Certain)	Poor	Technically infeasible (P2b)
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Appropriate channel maintenance strategies and techniques - woody debris	In Place
Improve floodplain connectivity	Not In Place

Chemical Status

Current Status (and certainty that status is less than good)	Does not require assessment
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Waterbody Category and Map Code.:	River - R7	Surveillance site: No
Waterbody ID and Name:	GB111067052120	Aldford Brook
National Grid Reference:	SJ 48508 58638	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015, Good Chemical Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Freshwater Fish Directive, Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067057080	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Good	Good	
Dissolved Oxygen	Good	Good	
pH	High	High	
Phosphate	Poor (Very Certain)	Good	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Good

Chemical elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Atrazine	High	High	
Diuron	High	High	

Waterbody Category and Map Code.:	River - R8	Surveillance site: Yes
Waterbody ID and Name:	GB111067052130	Pulford Brook
National Grid Reference:	SJ 37381 58660	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive), Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection	
Downstream Waterbody ID:	GB111067057080	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Quite Certain - WoE)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	Moderate (Uncertain)	Moderate	Not Required (MS), Technically infeasible (S2b)
Macrophytes	Moderate (Very Certain)	Moderate	Not Required (MS)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Moderate (Very Certain)	Good	
Dissolved Oxygen	Bad (Very Certain)	Bad	Technically infeasible (DO2b)
pH	High	High	
Phosphate	Poor (Very Certain)	Poor	Disproportionately expensive (P1c)
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	Moderate (Very Certain)	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Improve floodplain connectivity	Not In Place
Set-back embankments	Not In Place

Chemical Status

Current Status (and certainty that status is less than good)	Does not require assessment
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Waterbody Category and Map Code.:	River - R9	Surveillance site: No
Waterbody ID and Name:	GB111067052140	Henlake Brook
National Grid Reference:	SJ 42671 61644	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive), Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection	
Downstream Waterbody ID:	GB111067057080	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Moderate (Quite Certain)	Good	
Dissolved Oxygen	Moderate (Quite Certain)	Good	
pH	High	High	
Phosphate	Poor (Very Certain)	Poor	Disproportionately expensive (P1a)
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	Moderate (Quite Certain)	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R10	Surveillance site: No
Waterbody ID and Name:	GB111067052150	Balderton drain
National Grid Reference:	SJ 37687 62681	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive), Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection	
Downstream Waterbody ID:	GB531106708200	

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential

Current Status (and certainty that status is less than good) Moderate

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Appropriate vegetation control technique	In Place
Selective vegetation control regime	In Place
Phased de-watering and other techniques	In Place
Appropriate timing (vegetation control)	Not In Place

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R11	Surveillance site: No
Waterbody ID and Name:	GB111067052180	Emral Brook - un-named tributary from Hanmer
National Grid Reference:	SJ 42841 42131	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive	
Protected Area Designation:	Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052210	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Good	Good	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Moderate (Uncertain)	Moderate	Disproportionately expensive (P1a)
Temperature	High	High	
Ammonia (Annex 8)	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R12	Surveillance site: No
Waterbody ID and Name:	GB111067052190	Emral Brook - upper
National Grid Reference:	SJ 40310 40569	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive	
Protected Area Designation:	Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052210	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Good	Good	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Moderate (Uncertain)	Moderate	Disproportionately expensive (P1a)
Temperature	High	High	
Ammonia (Annex 8)	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R13	Surveillance site: No
Waterbody ID and Name:	GB111067052200	Worthenbury Brook - upper
National Grid Reference:	SJ 50878 43204	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive	
Protected Area Designation:	Freshwater Fish Directive, Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052220	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Good	Good	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Poor (Very Certain)	Poor	Disproportionately expensive (P1a)
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R14	Surveillance site:	No
Waterbody ID and Name:	GB111067052210	Emral Brook - lower	
National Grid Reference:	SJ 42145 44945		
Current Overall Status	Moderate		
Status Objective (Overall):	Good by 2027		
Status Objective(s):	Good Ecological Status by 2027		
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible		
Protected Area Designation:	Not Designated		
SSSI (Non-N2K) related:	No		
Hydromorphological Designation:	Not Designated A/HMWB		
Reason for Designation:			
Downstream Waterbody ID:	GB111067052090		

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Quite Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Quite Certain)	Moderate	Technically infeasible (B2a)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Good	Good	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Moderate (Quite Certain)	Moderate	Disproportionately expensive (P1a)
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R15	Surveillance site: Yes
Waterbody ID and Name:	GB111067052220	Worthenbury Brook - middle
National Grid Reference:	SJ 45665 44256	
Current Overall Status	Poor	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052090	

Ecological Status

Current Status (and certainty that status is less than good) Poor (Very Certain - WoE)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Moderate (Quite Certain)	Moderate	Technically infeasible (S2b)
Invertebrates	High	High	
Macrophytes	Moderate (Quite Certain)	Moderate	Disproportionately expensive (P1a), Technically infeasible (S2b)
Phytobenthos	Poor (Very Certain)	Poor	Disproportionately expensive (P1a), Technically infeasible (S2b)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Good	Good	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Poor (Very Certain)	Poor	Disproportionately expensive (P1a)
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good)	Does not require assessment
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Waterbody Category and Map Code.:	River - R16	Surveillance site: No
Waterbody ID and Name:	GB111067052230	Wych Brook
National Grid Reference:	SJ 49171 45172	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive	
Protected Area Designation:	Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052220	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Good	Good	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Poor (Uncertain)	Poor	Disproportionately expensive (P1c)
Temperature	High	High	
Ammonia (Annex 8)	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R17	Surveillance site: No
Waterbody ID and Name:	GB111067052160	Sandycroft Drain
National Grid Reference:	SJ 32998 64424	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive), Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection	
Downstream Waterbody ID:	GB531106708200	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	Bad (Very Certain)	Bad	Not Required (MS)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Educate landowners on sensitive management practices (urbanisation)	In Place
Appropriate techniques (invasive species)	In Place
Improve floodplain connectivity	In Place
Set-back embankments	In Place
Flood bunds (earth banks, in place of floodwalls)	In Place
Retain marginal aquatic and riparian habitats (channel alteration)	Not In Place
Increase in-channel morphological diversity	Not In Place

Chemical Status

Current Status (and certainty that status is less than good)	Does not require assessment
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Waterbody Category and Map Code.:	River - R18	Surveillance site: No
Waterbody ID and Name:	GB111067052172	Alyn - Leadmill to Hope, US STW
National Grid Reference:	SJ 25843 62418	
Current Overall Status	Poor	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052173	

Ecological Status

Current Status (and certainty that status is less than good) Poor (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Poor (Very Certain)	Poor	Technically infeasible (B2a)
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	Good	Good	
Dissolved Oxygen	Good	Good	
pH	High	High	
Phosphate	Poor (Very Certain)	Poor	Disproportionately expensive (P1c)
Temperature	High	High	
Copper	High	High	
Iron	High	High	
Zinc	High	High	
Ammonia (Annex 8)	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R19	Surveillance site: No
Waterbody ID and Name:	GB111067052171	Alyn - Rhydymwyn to Leadmill
National Grid Reference:	SJ 21760 65250	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027, Good Chemical Status by 2015	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection	
Downstream Waterbody ID:	GB111067052172	

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential

Current Status (and certainty that status is less than good) Moderate

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Poor (Very Certain)	Poor	Not Required (MS)
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Good	Good	
Temperature	High	High	
Copper	High	High	
Iron	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M1a)

Chemical Status

Current Status (and certainty that status is less than good)	Good
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Chemical elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Cadmium And Its Compounds	High	High	
Lead And Its Compounds	High	High	

Waterbody Category and Map Code.:	River - R20	Surveillance site:	No
Waterbody ID and Name:	GB111067052173	Alyn - Hope to confluence with Dee	
National Grid Reference:	SJ 33721 54225		
Current Overall Status	Poor		
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)	
Status Objective(s):	Good Ecological Status by 2027, Good Chemical Status by 2027		
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible		
Protected Area Designation:	Freshwater Fish Directive, Nitrates Directive		
SSSI (Non-N2K) related:	No		
Hydromorphological Designation:	Not Designated A/HMWB		
Reason for Designation:			
Downstream Waterbody ID:	GB111067057080		

Ecological Status

Current Status (and certainty that status is less than good) Poor (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Poor (Very Certain)	Poor	Disproportionately expensive (M5a), Technically infeasible (B2a)
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Poor (Very Certain)	Poor	Disproportionately expensive (P1c)
Temperature	High	High	
Arsenic	High	High	
Copper	High	High	
Iron	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Fail (Quite Certain)

Chemical elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Benzo (a) and (k) fluoranthene	High	High	Technically infeasible (C2a)
Benzo (ghi) perelyene and indeno (123-cd) pyrene	Moderate (Quite Certain)	Moderate	
Benzo(a)pyrene	High	High	
Cadmium And Its Compounds	High	High	
Fluoranthene	High	High	
Lead And Its Compounds	High	High	
Mercury And Its Compounds	High	High	
Nickel And Its Compounds	High	High	
Aldrin, Dieldrin, Endrin & Isodrin	High	High	
para - para DDT	High	High	

Waterbody Category and Map Code.:	River - R21	Surveillance site: Yes
Waterbody ID and Name:	GB111067051810	Alyn - upper river above Rhydymwyn
National Grid Reference:	SJ 18648 58219	
Current Overall Status	Poor	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027, Good Chemical Status by 2015	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Freshwater Fish Directive, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB111067052171	

Ecological Status

Current Status (and certainty that status is less than good) Poor (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Poor (Very Certain)	Poor	Disproportionately expensive (M5a)
Invertebrates	Moderate (Uncertain)	Moderate	Technically infeasible (B2a, B2d)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Iron	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Good

Chemical elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Cadmium And Its Compounds	High	High	
Lead And Its Compounds	High	High	

Waterbody Category and Map Code.:	Lake - L1	Surveillance site: No
Waterbody ID and Name:	GB31134813	Llyn Bedydd
National Grid Reference:	SJ 47071 39166	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Not Designated	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:		

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Macrophytes	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	Lake - L2	Surveillance site: No
Waterbody ID and Name:	GB31133644	Reservoir No. 2
National Grid Reference:	SJ 16328 64560	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Drinking Water Protected Area	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Drinking Water, Water Storage - non-specific	
Downstream Waterbody ID:		

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential			
Current Status (and certainty that status is less than good)	Moderate		
Ecological Potential Assessment			
Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Disproportionately expensive (M2h)
Chemical Status			
Current Status (and certainty that status is less than good)	Does not require assessment		

Waterbody Category and Map Code.:	Lake - L3	Surveillance site: No
Waterbody ID and Name:	GB31133659	Moel Dywyll
National Grid Reference:	SJ 15549 64168	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Drinking Water Protected Area	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Drinking Water, Water Storage - non-specific	
Downstream Waterbody ID:		

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential			
Current Status (and certainty that status is less than good)	Moderate		
Ecological Potential Assessment			
Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Disproportionately expensive (M2h)
Chemical Status			
Current Status (and certainty that status is less than good)	Does not require assessment		

Waterbody Category and Map Code.:	Lake - L4	Surveillance site: No
Waterbody ID and Name:	GB31133661	Cilcain Reservoir 3
National Grid Reference:	SJ 16680 64172	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Drinking Water Protected Area	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Drinking Water, Water Storage - non-specific	
Downstream Waterbody ID:		

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential			
Current Status (and certainty that status is less than good)	Moderate		
Ecological Potential Assessment			
Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Disproportionately expensive (M2h)
Chemical Status			
Current Status (and certainty that status is less than good)	Does not require assessment		

Waterbody Category and Map Code.:	Lake - L5	Surveillance site: No
Waterbody ID and Name:	GB31134102	Nant-y-Ffrith Reservoir
National Grid Reference:	SJ 24371 53102	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Drinking Water Protected Area	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Drinking Water, Water Storage - non-specific	
Downstream Waterbody ID:		

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential			
Current Status (and certainty that status is less than good)	Moderate		
Ecological Potential Assessment			
Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Disproportionately expensive (M2h)
Chemical Status			
Current Status (and certainty that status is less than good)	Does not require assessment		

Waterbody Category and Map Code.:	Lake - L6	Surveillance site: No
Waterbody ID and Name:	GB31134038	Llyn Cyfynwy
National Grid Reference:	SJ 21734 54688	
Current Overall Potential	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Drinking Water Protected Area, Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:		

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential (note: no biology data)

Current Status (and certainty that status is less than good) Good

Ecological Potential Assessment
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Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Ensure the seasonal pattern of water levels during each year is managed so as to enable the establishment and retention of aquatic plant and animal communities in the shore zone of the impoundment.	In Place
Ensure the rate and range of any artificial drawdown is appropriately managed to maintain aquatic plant and animal communities in the shore zones of water storage and supply with gently shelving shore zones.	In Place

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	Lake - L7	Surveillance site: No
Waterbody ID and Name:	GB31134167	Pendinas Reservoir
National Grid Reference:	SJ 23667 51795	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Drinking Water Protected Area	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Water Storage - non-specific	
Downstream Waterbody ID:		

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential

Current Status (and certainty that status is less than good) Moderate

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3d)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Ensure the seasonal pattern of water levels during each year is managed so as to enable the establishment and retention of aquatic plant and animal communities in the shore zone of the impoundment.	Not In Place
Ensure the rate and range of any artificial drawdown is appropriately managed to maintain aquatic plant and animal communities in the shore zones of water storage and supply with gently shelving shore zones.	Not In Place

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	Lake - L8	Surveillance site: Yes
Waterbody ID and Name:	GB31134780	Hanmer Mere
National Grid Reference:	SJ 45279 39329	
Current Overall Status	Poor	
Status Objective (Overall):	Good by 2027	
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Not Designated	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:		

Ecological Status

Current Status (and certainty that status is less than good) Poor (Very Certain - WoE)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Chironom Invertebrates	Moderate (Very Certain)	Moderate	Technically infeasible (B2a)
Macrophytes	Good	Good	
Phytobenthos	Poor (Very Certain)	Poor	Technically infeasible (P2b)
Phytoplankton	Poor (Very Certain)	Poor	Technically infeasible (P2b)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Acid Neutralising Capacity	High	High	
Ammonia (Phys-Chem)	Good	Good	
Dissolved Oxygen	Good	Good	
Total Phosphorus	Bad (Very Certain)	Bad	Technically infeasible (P2b)
Ammonia (Annex 8)	Good	Good	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	Lake - L9	Surveillance site: No
Waterbody ID and Name:	GB31147045	Mill Pond
National Grid Reference:	SJ 17224 64794	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Drinking Water Protected Area	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Drinking Water, Water Storage - non-specific	
Downstream Waterbody ID:		

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential			
Current Status (and certainty that status is less than good)	Moderate		
Ecological Potential Assessment			
Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Disproportionately expensive (M2h)
Chemical Status			
Current Status (and certainty that status is less than good)	Does not require assessment		

B.7 Tidal Dee river catchment

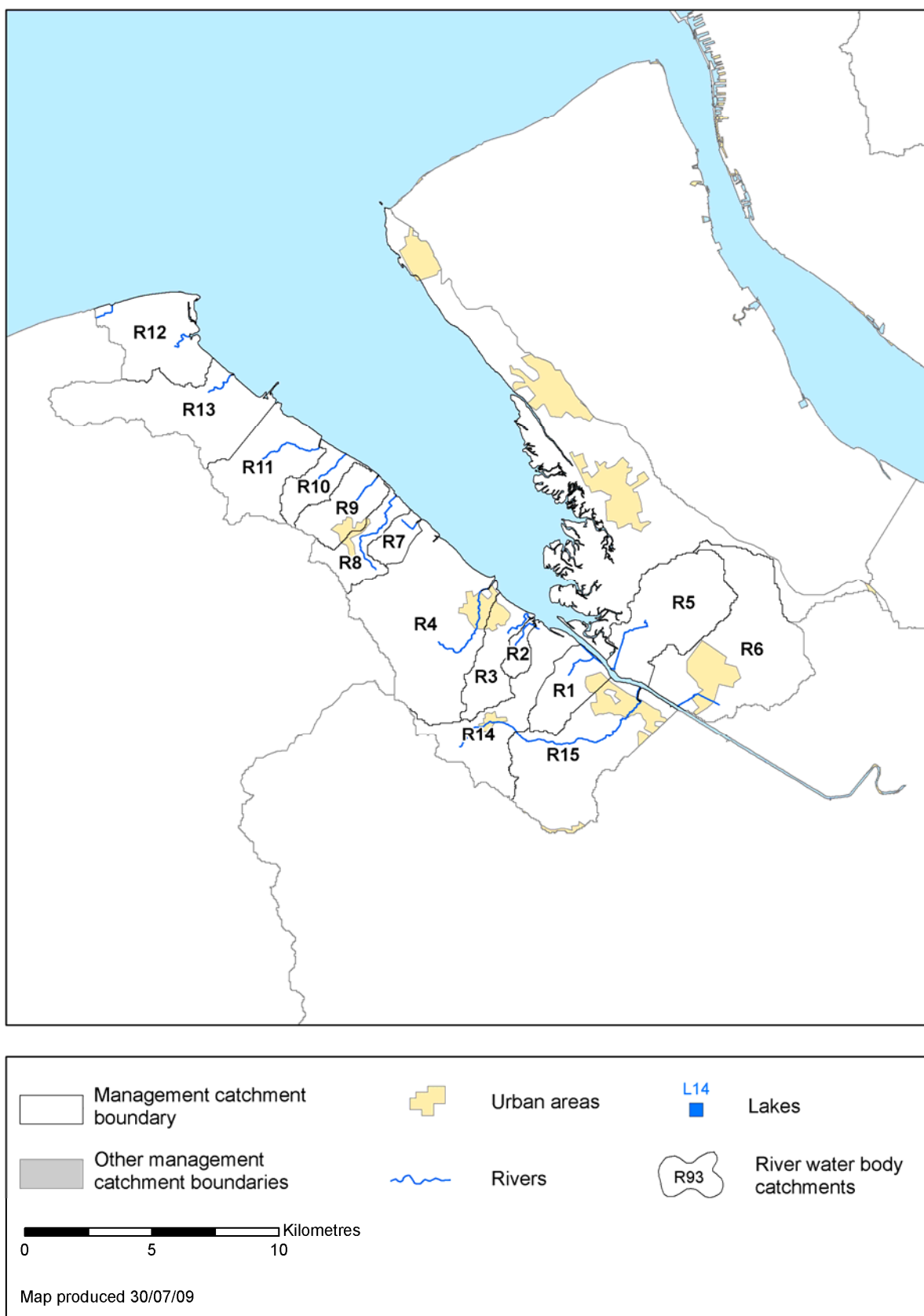
Rivers and lakes

There are 15 river water bodies (of which 6 are designated as heavily modified) and no lake water bodies within the Tidal Dee river catchment.

Figure B.7.1 **Status objectives for rivers in the Tidal Dee river catchment**

Status objectives for rivers in the Tidal Dee river catchment						
Water body category	Good or high now	Good or high in 2015	Good or high in 2021	Good or high in 2027	Less than good in 2015	Total number of water bodies
Natural						
Rivers	2	3	3	9	6	9
Artificial/Heavily modified water bodies						
HMWB	1	1	1	6	5	6
AWB	0	0	0	0	0	0

Figure B.7.2 River water bodies in the Tidal Dee river catchment



Water body tables for rivers in the Tidal Dee catchment

This section contains detailed information on the current status and objectives for river and lake water bodies in the catchment. The tables are arranged by water body type and by map code number within these groupings.

Note: In the following water body tables, only the relevant elements of the status objectives (shown under the orange sub headings) are shown.

Waterbody Category and Map Code.:	River - R1	Surveillance site: No
Waterbody ID and Name:	GB111067056890	Kelsterton Brook
National Grid Reference:	SJ 27887 70696	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB531106708200	

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R2	Surveillance site: No
Waterbody ID and Name:	GB111067056910	Un-named Dee Estuary south
National Grid Reference:	SJ 25715 71704	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB531106708200	

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R3	Surveillance site: No
Waterbody ID and Name:	GB111067056920	Un-named Dee Estuary South
National Grid Reference:	SJ 25687 72137	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB531106708200	

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R4	Surveillance site: No
Waterbody ID and Name:	GB111067056940	Swinchiard Brook
National Grid Reference:	SJ 23815 71863	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Shellfish Water Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB531106708200	

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Good	Good	
Temperature	High	High	
Copper	High	High	
Iron	High	High	
Zinc	Moderate (Uncertain)	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R5	Surveillance site: No
Waterbody ID and Name:	GB111067056950	Burton Brook
National Grid Reference:	SJ 29692 71648	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Not Designated	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection, Wider Environment	
Downstream Waterbody ID:	GB531106708200	

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential

Current Status (and certainty that status is less than good) Moderate

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Does not Support Good (Quite Certain)	Does not Support Good	Disproportionately expensive (HR4a)

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Disproportionately expensive (M2c), Technically infeasible (M3a)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Appropriate timing (vegetation control)	In Place
Appropriate vegetation control technique	In Place
Selective vegetation control regime	In Place
Flood bunds (earth banks, in place of floodwalls)	In Place
Improve floodplain connectivity	Not In Place
Set-back embankments	Not In Place

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R6	Surveillance site: No
Waterbody ID and Name:	GB111067056960	Shotwick Brook
National Grid Reference:	SJ 32589 69422	
Current Overall Potential	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection, Wider Environment	
Downstream Waterbody ID:	GB531106708200	

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential (note: no biology data)

Current Status (and certainty that status is less than good) Good

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Educate landowners on sensitive management practices (urbanisation)	In Place
Appropriate timing (vegetation control)	In Place
Appropriate vegetation control technique	In Place
Selective vegetation control regime	In Place

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R7	Surveillance site: No
Waterbody ID and Name:	GB111067056970	Un-named Dee Estuary south
National Grid Reference:	SJ 21153 76091	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Shellfish Water Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection	
Downstream Waterbody ID:	GB531106708200	

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential

Current Status (and certainty that status is less than good) Moderate

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Does not Support Good (Quite Certain)	Does not Support Good	Disproportionately expensive (HR4a)

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Appropriate timing (vegetation control)	Not In Place

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R8	Surveillance site: No
Waterbody ID and Name:	GB111067056980	Un-named Dee Estuary South
National Grid Reference:	SJ 19836 75764	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Shellfish Water Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB531106708200	

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R9	Surveillance site: No
Waterbody ID and Name:	GB111067056990	Greenfield Stream
National Grid Reference:	SJ 19425 77437	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Technically infeasible	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive), Shellfish Water Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection, Urbanisation	
Downstream Waterbody ID:	GB531106708200	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	Moderate (Very Certain)	Moderate	Technically infeasible (C2a)
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Preserve and where possible enhance ecological value of marginal aquatic habitat, banks and riparian zone	In Place

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	River - R10	Surveillance site: No
Waterbody ID and Name:	GB111067057000	Un-named Dee Estuary South
National Grid Reference:	SJ 18087 78242	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Shellfish Water Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB531106708200	

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R11	Surveillance site: No
Waterbody ID and Name:	GB111067057050	Un-named Dee Estuary South
National Grid Reference:	SJ 16473 79329	
Current Overall Status	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Shellfish Water Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB531106708200	

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Status

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R12	Surveillance site: No
Waterbody ID and Name:	GB111067057070	Un-named Dee Estuary South
National Grid Reference:	SJ 12306 83412	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Shellfish Water Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Flood Protection	
Downstream Waterbody ID:	GB531106708200	

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential

Current Status (and certainty that status is less than good) Moderate

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Technically infeasible (M3a)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Retain marginal aquatic and riparian habitats (channel alteration)	Not In Place

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R13	Surveillance site: No
Waterbody ID and Name:	GB111067057060	Y Garth
National Grid Reference:	SJ 13895 81587	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027	
Justification if overall objective is not good status by 2015:	Disproportionately expensive, Technically infeasible	
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive), Shellfish Water Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Other	
Downstream Waterbody ID:	GB531106708200	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Very Certain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Good	Good	
Temperature	High	High	
Copper	High	High	
Zinc	Moderate (Very Certain)	Moderate	Technically infeasible (C2a)
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Does not Support Good (Uncertain)	Does not Support Good	Disproportionately expensive (HR2a)

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Disproportionately expensive (M2d)

Mitigation Measures that have defined Ecological Potential

Mitigation Measure

Status

Structures or other mechanisms in place and managed to enable fish to access waters upstream and downstream of the impounding works.

Not In Place

Chemical Status

Current Status (and certainty that status is less than good)

Does not require assessment

Waterbody Category and Map Code.:	River - R14	Surveillance site: No
Waterbody ID and Name:	GB111067056900	Lead Brook
National Grid Reference:	SJ 26274 72004	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB531106708200	

Ecological Status (note: no biology data)

Current Status (and certainty that status is less than good) Good

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Good	Good	
Temperature	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

Current Status (and certainty that status is less than good) Does not require assessment

Waterbody Category and Map Code.:	River - R15	Surveillance site: No
Waterbody ID and Name:	GB111067056880	Lead Brook
National Grid Reference:	SJ 27339 67465	
Current Overall Status	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Status by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Natura 2000 (Habitats and/or Birds Directive)	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Not Designated A/HMWB	
Reason for Designation:		
Downstream Waterbody ID:	GB531106708200	

Ecological Status

Current Status (and certainty that status is less than good) Good

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Invertebrates	Good	Good	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
Dissolved Oxygen	High	High	
pH	High	High	
Phosphate	Good	Good	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Quantity and Dynamics of Flow	Supports Good	Supports Good	
Morphology	Supports Good	Supports Good	

Chemical Status

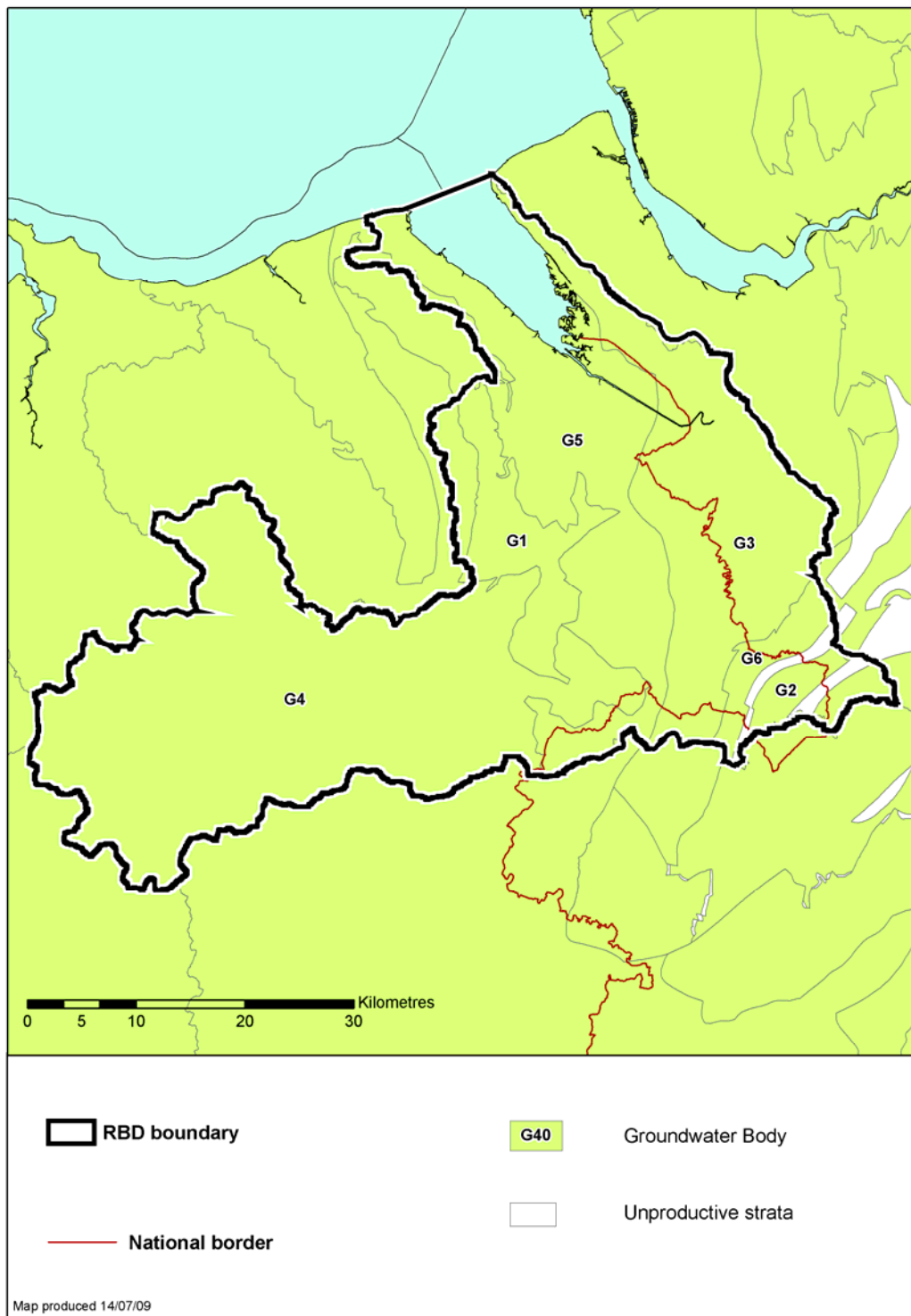
Current Status (and certainty that status is less than good) Does not require assessment

B.8 Groundwater

Groundwater bodies in the Dee River Basin District

There are 6 groundwater bodies in the Dee River Basin District.

Figure B.8.1 Groundwater bodies in the Dee River Basin District



Water body tables for groundwater in the Dee River Basin District

This section contains detailed information on the current status and objectives for groundwater bodies in the river basin district. The tables are arranged by map code number.

Note: In the following water body tables, only the relevant elements of the status objectives (shown under the orange sub headings) are shown.

Waterbody Category and Map Code.:	Groundwater - G1
Waterbody ID and Name:	GB41101G202200 Dee Carboniferous Limestone
Current Overall Status	Good
Status Objective (Overall):	Good by 2015
Status Objective(s):	Good Quantitative Status by 2015, Good Chemical Status by 2015
Justification if overall objective is not good status by 2015:	
Protected Area Designation:	Drinking Water Protected Area, Nitrates Directive
Groundwater body has an upward trend in pollutant concentrations:	No

Quantitative Status

Current Status (and confidence in this assessment)	Good (Low)
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Quantitative elements

Element	Current status (and confidence)	Predicted Status by 2015	Justification for not achieving good status by 2015
Impact on Wetlands	Good (Low)	Good	
Impact On Surface Waters	Good (Low)	Good	
Saline Intrusion	Good (Low)	Good	
Water Balance	Good (High)	Good	

Chemical Status

Current Status (and confidence in this assessment)	Good (Low)
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Chemical elements

Element	Current status (and confidence)	Predicted Status by 2015	Justification for not achieving good status by 2015
Drinking Water Protected Area	Good (Low)	Good	
General Chemical Test	Good (Low)	Good	
Impact on Wetlands	Good (Low)	Good	
Impact On Surface Waters	Good (Low)	Good	
Saline Intrusion	Good (Low)	Good	

Pressures and Risks

Pressures	Risk Category	Element against which assessed
Nutrients	Nitrate	General Chemical Test, GWDTE Test, DrWPA Test

Threshold value (TV), trends and other relevant information (for groundwater only)

Substance	TV	Units	Exceedance	Hazardous	Min NBL	Max NBL	Upward trend	Starting point for reversing the trend
Ammonia	0.300	mg/l	No	No	0.300	0.300	No	75% of relevant TV
Nitrate	42.000	mg/l	No	No			No	75% of relevant TV

Waterbody Category and Map Code.:	Groundwater - G2
Waterbody ID and Name:	GB40902G991500 Dee Triassic Mercia Mudstone (SE)
Current Overall Status	Good
Status Objective (Overall):	Good by 2015
Status Objective(s):	Good Quantitative Status by 2015, Good Chemical Status by 2015
Justification if overall objective is not good status by 2015:	
Protected Area Designation:	Drinking Water Protected Area
Groundwater body has an upward trend in pollutant concentrations:	No

Quantitative Status

Current Status (and confidence in this assessment)	Good (Low)
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Quantitative elements

Element	Current status (and confidence)	Predicted Status by 2015	Justification for not achieving good status by 2015
Impact on Wetlands	Good (High)	Good	
Impact On Surface Waters	Good (High)	Good	
Saline Intrusion	Good (Low)	Good	
Water Balance	Good (High)	Good	

Chemical Status

Current Status (and confidence in this assessment)	Good (Low)
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Chemical elements

Element	Current status (and confidence)	Predicted Status by 2015	Justification for not achieving good status by 2015
Drinking Water Protected Area	Good (Low)	Good	
General Chemical Test	Good (Low)	Good	
Impact on Wetlands	Good (Low)	Good	
Impact On Surface Waters	Good (Low)	Good	
Saline Intrusion	Good (Low)	Good	

Pressures and Risks

Pressures	Risk Category	Element against which assessed
Nutrients	Nitrate	General Chemical Test, GWDTE Test, DrWPA Test

Threshold value (TV), trends and other relevant information (for groundwater only)

Substance	TV	Units	Exceedance	Hazardous	Min NBL	Max NBL	Upward trend	Starting point for reversing the trend
Ammonia	0.300	mg/l	No	No	0.000	0	No	75% of relevant TV
Nitrate	42.000	mg/l	No	No			No	75% of relevant TV

Waterbody Category and Map Code.:	Groundwater - G3
Waterbody ID and Name:	GB41101G202400 Dee Permo-Triassic Sandstone
Current Overall Status	Poor
Status Objective (Overall):	Good by 2027
Status Objective(s):	Good Quantitative Status by 2027, Good Chemical Status by 2015
Justification if overall objective is not good status by 2015:	Disproportionately expensive
Protected Area Designation:	Drinking Water Protected Area, Nitrates Directive
Groundwater body has an upward trend in pollutant concentrations:	No

Quantitative Status

Current Status (and confidence in this assessment)	Poor (Low)
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Quantitative elements

Element	Current status (and confidence)	Predicted Status by 2015	Justification for not achieving good status by 2015
Impact on Wetlands	Good (Low)	Good	
Impact On Surface Waters	Poor (Low)	Poor	Disproportionately expensive (GQ1b)
Saline Intrusion	Good (Low)	Good	
Water Balance	Good (High)	Good	

Chemical Status

Current Status (and confidence in this assessment)	Good (Low)
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Chemical elements

Element	Current status (and confidence)	Predicted Status by 2015	Justification for not achieving good status by 2015
Drinking Water Protected Area	Good (High)	Good	
General Chemical Test	Good (Low)	Good	
Impact on Wetlands	Good (Low)	Good	
Impact On Surface Waters	Good (High)	Good	
Saline Intrusion	Good (Low)	Good	

Pressures and Risks

Pressures	Risk Category	Element against which assessed
Nutrients	Nitrate	General Chemical Test, GWDTE Test, DrWPA Test
Hazardous Substances and other pollutants, Nutrients, Abstraction and other artificial flow pressures	DrWPA	DrWPA Test
Abstraction and other artificial flow pressures	Saline Intrusion	General Chemical Test, Saline Intrusion Test, DrWPA Test

Threshold value (TV), trends and other relevant information (for groundwater only)

Substance	TV	Units	Exceedance	Hazardous	Min NBL	Max NBL	Upward trend	Starting point for reversing the trend
Diuron	0.075 ug/l		Yes	Yes			No	75% of relevant TV
Nickel (Total)	15.000 ug/l		Yes	Yes	0.000	16.600	No	75% of relevant TV
Ammonia	0.300 mg/l		No	No	0.000	0.300	No	75% of relevant TV
Nitrate	42.000 mg/l		Yes	No			No	75% of relevant TV
Clopyralid	0.075 ug/l		Yes	Yes			No	75% of relevant TV
Sodium	112.500 mg/l		Yes	No			No	75% of relevant TV
Electrical conductivity	1875.000 uS/cm		Yes	No			No	75% of relevant TV

Waterbody Category and Map Code.: Groundwater - G4

Waterbody ID and Name: [GB41102G200200](#) Dee Silurian/Ordovician

Current Overall Status Good

Status Objective (Overall): Good by 2015

Status Objective(s): Good Quantitative Status by 2015, Good Chemical Status by 2015

Justification if overall objective is not good status by 2015:

Protected Area Designation: Drinking Water Protected Area, Nitrates Directive

Groundwater body has an upward trend in pollutant concentrations: No

Quantitative Status

Current Status (and confidence in this assessment) Good (Low)

Quantitative elements

Element	Current status (and confidence)	Predicted Status by 2015	Justification for not achieving good status by 2015
Impact on Wetlands	Good (Low)	Good	
Impact On Surface Waters	Good (High)	Good	
Saline Intrusion	Good (Low)	Good	
Water Balance	Good (High)	Good	

Chemical Status

Current Status (and confidence in this assessment) Good (Low)

Chemical elements

Element	Current status (and confidence)	Predicted Status by 2015	Justification for not achieving good status by 2015
Drinking Water Protected Area	Good (Low)	Good	
General Chemical Test	Good (Low)	Good	
Impact on Wetlands	Good (Low)	Good	
Impact On Surface Waters	Good (Low)	Good	
Saline Intrusion	Good (Low)	Good	

Pressures and Risks

Pressures	Risk Category	Element against which assessed
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Waterbody Category and Map Code.:	Groundwater - G5
Waterbody ID and Name:	GB41102G204800 Dee Carboniferous Coal Measures
Current Overall Status	Poor
Status Objective (Overall):	Good by 2027
Status Objective(s):	Good Quantitative Status by 2015, Good Chemical Status by 2027
Justification if overall objective is not good status by 2015:	Disproportionately expensive
Protected Area Designation:	Drinking Water Protected Area, Nitrates Directive
Groundwater body has an upward trend in pollutant concentrations:	No

Quantitative Status

Current Status (and confidence in this assessment)	Good (Low)
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Quantitative elements

Element	Current status (and confidence)	Predicted Status by 2015	Justification for not achieving good status by 2015
Impact on Wetlands	Good (Low)	Good	
Impact On Surface Waters	Good (Low)	Good	
Saline Intrusion	Good (High)	Good	
Water Balance	Good (High)	Good	

Chemical Status

Current Status (and confidence in this assessment)	Poor (High)
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Chemical elements

Element	Current status (and confidence)	Predicted Status by 2015	Justification for not achieving good status by 2015
Drinking Water Protected Area	Good (High)	Good	
General Chemical Test	Good (High)	Good	
Impact on Wetlands	Good (Low)	Good	
Impact On Surface Waters	Poor (High)	Poor	Disproportionately expensive (GC5a)
Saline Intrusion	Good (High)	Good	

Pressures and Risks

Pressures	Risk Category	Element against which assessed
Hazardous Substances and other pollutants	Mines	General Chemical Test, GWDTE Test, DrWPA Test, GW-SW Test, Saline Intrusion Test
Hazardous Substances and other pollutants, Nutrients, Abstraction and other artificial flow pressures	DrWPA	DrWPA Test

Threshold value (TV), trends and other relevant information (for groundwater only)

Substance	TV	Units	Exceedance	Hazardous	Min NBL	Max NBL	Upward trend	Starting point for reversing the trend
Chromium (Total)	8.320	ug/l	No	Yes	0.000	1.000	No	75% of relevant TV
Zinc (Dissolved)	175.612	ug/l	Yes	No	0.000	190.000	No	75% of relevant TV
Chromium (Dissolved)	11.708	ug/l	No	Yes	0.000	1.000	No	75% of relevant TV
Nickel (Dissolved)	15.000	ug/l	No	Yes	0.000	10.000	No	75% of relevant TV
Copper (Dissolved)	23.415	ug/l	No	No	0.000	86.900	No	75% of relevant TV
Copper (Total)	16.639	ug/l	Yes	No	0.000	86.900	No	75% of relevant TV
Zinc (Total)	124.792	ug/l	Yes	No	0.000	190.000	No	75% of relevant TV
Nickel (Total)	15.000	ug/l	No	Yes	0.000	10.000	No	75% of relevant TV
Nitrate	42.000	mg/l	No	No			No	75% of relevant TV
Lead (Total)	11.980	ug/l	Yes	Yes			No	75% of relevant TV
Lead (Dissolved)	16.859	ug/l	No	Yes			No	75% of relevant TV
Cadmium (Dissolved)	0.426	ug/l	No	Yes			No	75% of relevant TV
Cadmium (Total)	0.333	ug/l	Yes	Yes			No	75% of relevant TV
Electrical conductivity	1875.000	uS/cm	No	No			No	75% of relevant TV
Aluminium	150.000	ug/l	No	Yes			No	75% of relevant TV
Sodium	112.500	mg/l	No	No			No	75% of relevant TV

Waterbody Category and Map Code.: Groundwater - G6

Waterbody ID and Name: [GB40902G991400](#) Dee Triassic Mercia Mudstone (NW)

Current Overall Status Good

Status Objective (Overall): Good by 2015

Status Objective(s): Good Quantitative Status by 2015, Good Chemical Status by 2015

Justification if overall objective is not good status by 2015:

Protected Area Designation: Drinking Water Protected Area

Groundwater body has an upward trend in pollutant concentrations: No

Quantitative Status

Current Status (and confidence in this assessment) Good (Low)

Quantitative elements

Element	Current status (and confidence)	Predicted Status by 2015	Justification for not achieving good status by 2015
Impact on Wetlands	Good (Low)	Good	
Impact On Surface Waters	Good (High)	Good	
Saline Intrusion	Good (Low)	Good	
Water Balance	Good (High)	Good	

Chemical Status

Current Status (and confidence in this assessment) Good (Low)

Chemical elements

Element	Current status (and confidence)	Predicted Status by 2015	Justification for not achieving good status by 2015
Drinking Water Protected Area	Good (Low)	Good	
General Chemical Test	Good (Low)	Good	
Impact on Wetlands	Good (Low)	Good	
Impact On Surface Waters	Good (Low)	Good	
Saline Intrusion	Good (Low)	Good	

Pressures and Risks

Pressures	Risk Category	Element against which assessed
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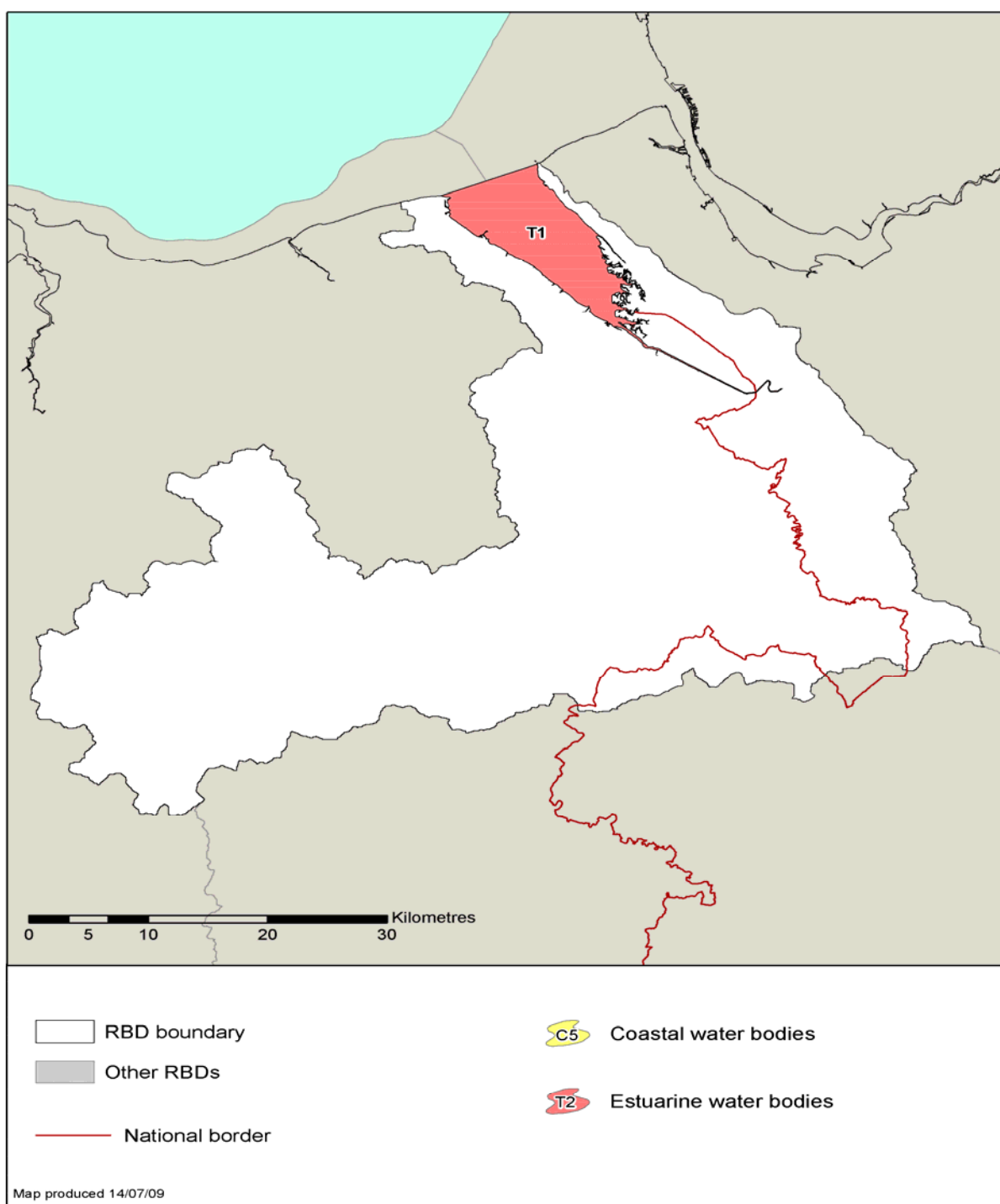
B.9 Estuaries and Coastal Waters

Estuarine and coastal water bodies in the Dee River Basin District

There is one estuarine water body and no coastal water bodies in the Dee River Basin District.

NB: The coastal water bodies form part of the Western Wales and North West RBMPs.

Figure B.9.1 **Estuarine water body in the Dee River Basin District**



Water body table for the estuary in the Dee River Basin District

This section contains detailed information on the current status and objectives for the estuarine water body in the river basin district. The table is arranged by map code number.

Note: In the following water body table, only the relevant elements of the status objectives (shown under the orange sub headings) are shown.

Waterbody Category and Map Code.:	Transitional - T1	Surveillance site: Yes
Waterbody ID and Name:	GB531106708200	DEE (N. WALES)
National Grid Reference:	SJ 24313 76847	
Current Overall Potential	Moderate	
Status Objective (Overall):	Good by 2027	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2027, Good Chemical Status by 2015	
Justification if overall objective is not good status by 2015:	Disproportionately expensive	
Protected Area Designation:	Bathing Water Directive, Natura 2000 (Habitats and/or Birds Directive), Nitrates Directive, Shellfish Water Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Heavily Modified	
Reason for Designation:	Navigation, Shellfisheries	
Downstream Waterbody ID:	GB641211630001	

Ecological Potential

Current Status (and certainty that status is less than good) Moderate (Uncertain)

Biological elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Fish	Good	Good	
Invertebrates	Good	Good	
Macroalgae	High	High	

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Dissolved Inorganic Nitrogen	Moderate (Uncertain)	Moderate	Disproportionately expensive (N1o)
Dissolved Oxygen	High	High	
Iron	High	High	

Supporting conditions

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Tidal Regime - Freshwater Flow	Supports Good	Supports Good	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Moderate	Moderate	Disproportionately expensive (M2b)

Chemical Status

Current Status (and certainty that status is less than good) Good

Chemical elements

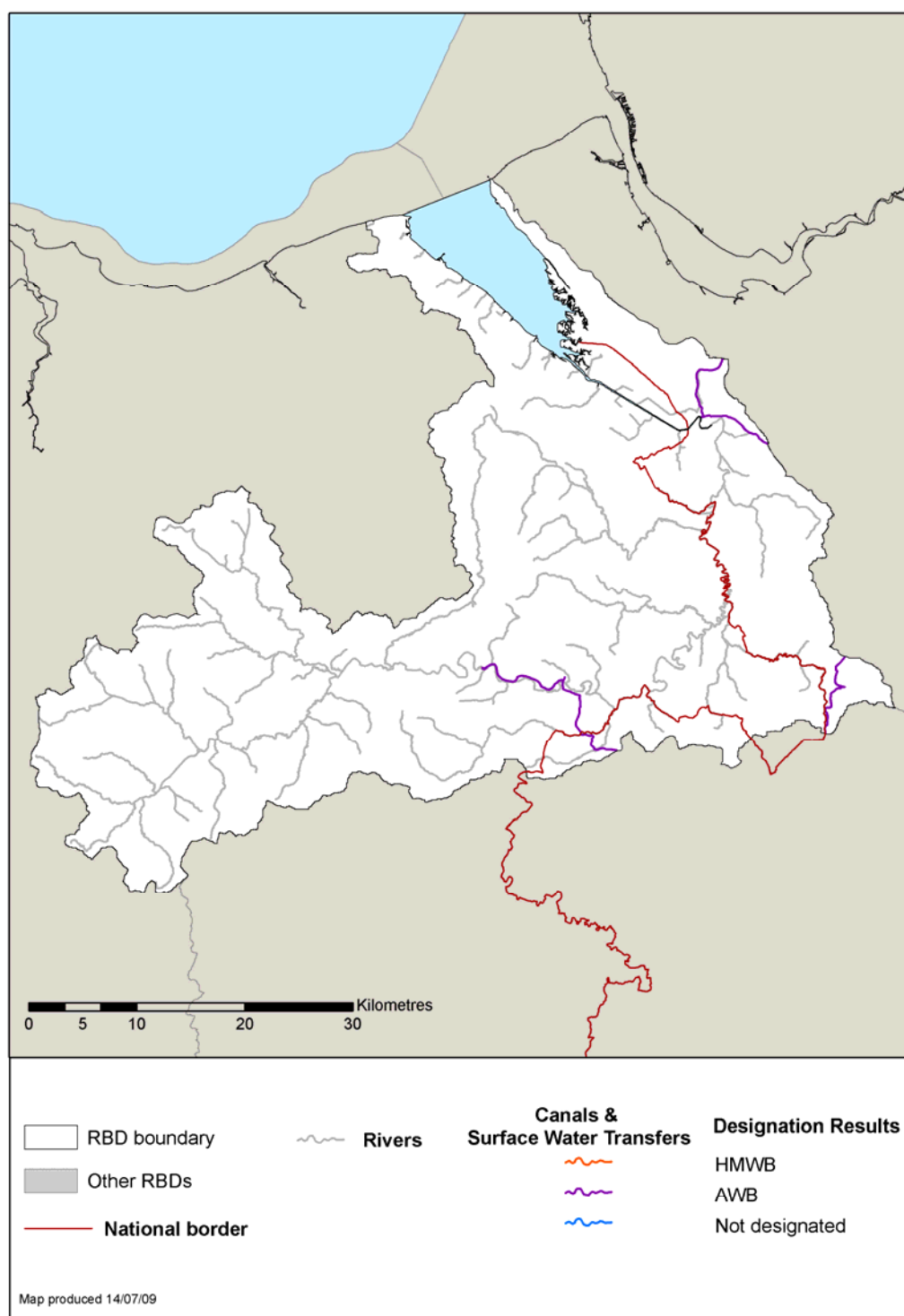
Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Nickel And Its Compounds	High	High	

B.10 Canals, surface water transfers and SSSI ditches

Canals, surface water transfer and SSSI ditches in the Dee River Basin District

There are two canal water bodies, no surface water transfer water bodies and no SSSI ditches in the Dee River Basin District.

Figure B.10.1 **Canals in the Dee River Basin District**



Water body tables for canals in the Dee River Basin District

The current status and objectives for canals in the following tables are largely based on hydromorphological assessments. Where information on any biological, physico-chemical or chemical elements was available these results have also been incorporated. The biological, physico-chemical or chemical elements will be further assessed, where appropriate, and the results will inform future assessments of status and objectives.

The hydromorphological assessments presented here are based on the presence or absence of measures that mitigate the modified or artificial hydromorphological characteristics of the canal. This approach is explained in more detail in sections B.4.1 and B 4.2 in this annex .

Note: In the following water body tables, only the relevant elements of the status objectives (shown under the orange sub headings) are shown.

Waterbody Category and Map Code.:	Canal - Ca1	Surveillance site: No
Waterbody ID and Name:	GB70910287	Dee Branch (Shropshire Union)
National Grid Reference:	SJ 39988 66606	
Current Overall Potential	Good	
Status Objective (Overall):	Good by 2015	
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Not Designated	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Artificial	
Reason for Designation:	Navigation, Urbanisation, Wider Environment	
Downstream Waterbody ID:		

Note: Current Status and Status Objectives for this water body are based on Expert Judgement

Ecological Potential (note: no biology data)

Current Status (and certainty that status is less than good) Good

Ecological Potential Assessment
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Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Manage disturbance	In Place
Preserve and where possible enhance ecological value of marginal aquatic habitat, banks and riparian zone	In Place
Avoid the need to dredge (e.g. minimise under-keel clearance; use fluid mud navigation; flow manipulation or training works)	In Place
Prepare a dredging / disposal strategy	In Place
Reduce impact of dredging	In Place
Reduce sediment resuspension	In Place
Alter timing of dredging / disposal	In Place
Bank rehabilitation / reprofiling	In Place
Site selection (dredged material disposal) (e.g. avoid sensitive sites)	In Place
Awareness raising / information boards (boat wash / sources of fine sediment)	In Place
Phased de-watering and other techniques	In Place
Selective vegetation control regime	In Place
Appropriate vegetation control technique	In Place
Appropriate timing (vegetation control)	In Place
Appropriate techniques (invasive species)	In Place
Modify vessel design	In Place
Vessel Management	In Place
Sediment management	In Place

Chemical Status**Current Status (and certainty
that status is less than good)**

Does not require assessment

Waterbody Category and Map Code.:	Canal - Ca2	Surveillance site: No
Waterbody ID and Name:	GB70910082	Llangollen Canal
National Grid Reference:	SJ 32541 35164	
Current Overall Potential	Good	
Status Objective (Overall):	Good by 2015	(For Protected Area Objectives see Annex D)
Status Objective(s):	Good Ecological Potential by 2015	
Justification if overall objective is not good status by 2015:		
Protected Area Designation:	Nitrates Directive	
SSSI (Non-N2K) related:	No	
Hydromorphological Designation:	Artificial	
Reason for Designation:	Navigation	
Downstream Waterbody ID:		

Ecological Potential (note: no biology data)

Current Status (and certainty that status is less than good) Good

Supporting elements

Element	Current status (and certainty of less than good)	Predicted Status by 2015	Justification for not achieving good status by 2015
Ammonia (Phys-Chem)	High	High	
pH	High	High	
Phosphate	High	High	
Temperature	High	High	
Copper	High	High	
Zinc	High	High	
Ammonia (Annex 8)	High	High	

Ecological Potential Assessment

Element	Current status	Predicted Status by 2015	Justification for not achieving good status by 2015
Mitigation Measures Assessment	Good	Good	

Mitigation Measures that have defined Ecological Potential

Mitigation Measure	Status
Manage disturbance	In Place
Preserve and where possible enhance ecological value of marginal aquatic habitat, banks and riparian zone	In Place
Avoid the need to dredge (e.g. minimise under-keel clearance; use fluid mud navigation; flow manipulation or training works)	In Place
Prepare a dredging / disposal strategy	In Place
Reduce impact of dredging	In Place
Reduce sediment resuspension	In Place
Alter timing of dredging / disposal	In Place
Bank rehabilitation / reprofiling	In Place
Site selection (dredged material disposal) (e.g. avoid sensitive sites)	In Place
Awareness raising / information boards (boat wash / sources of fine sediment)	In Place
Phased de-watering and other techniques	In Place
Selective vegetation control regime	In Place
Appropriate vegetation control technique	In Place
Appropriate timing (vegetation control)	In Place
Appropriate techniques (invasive species)	In Place
Modify vessel design	In Place
Vessel Management	In Place
Sediment management	In Place

Chemical Status

Current Status (and certainty that status is less than good)

Does not require assessment