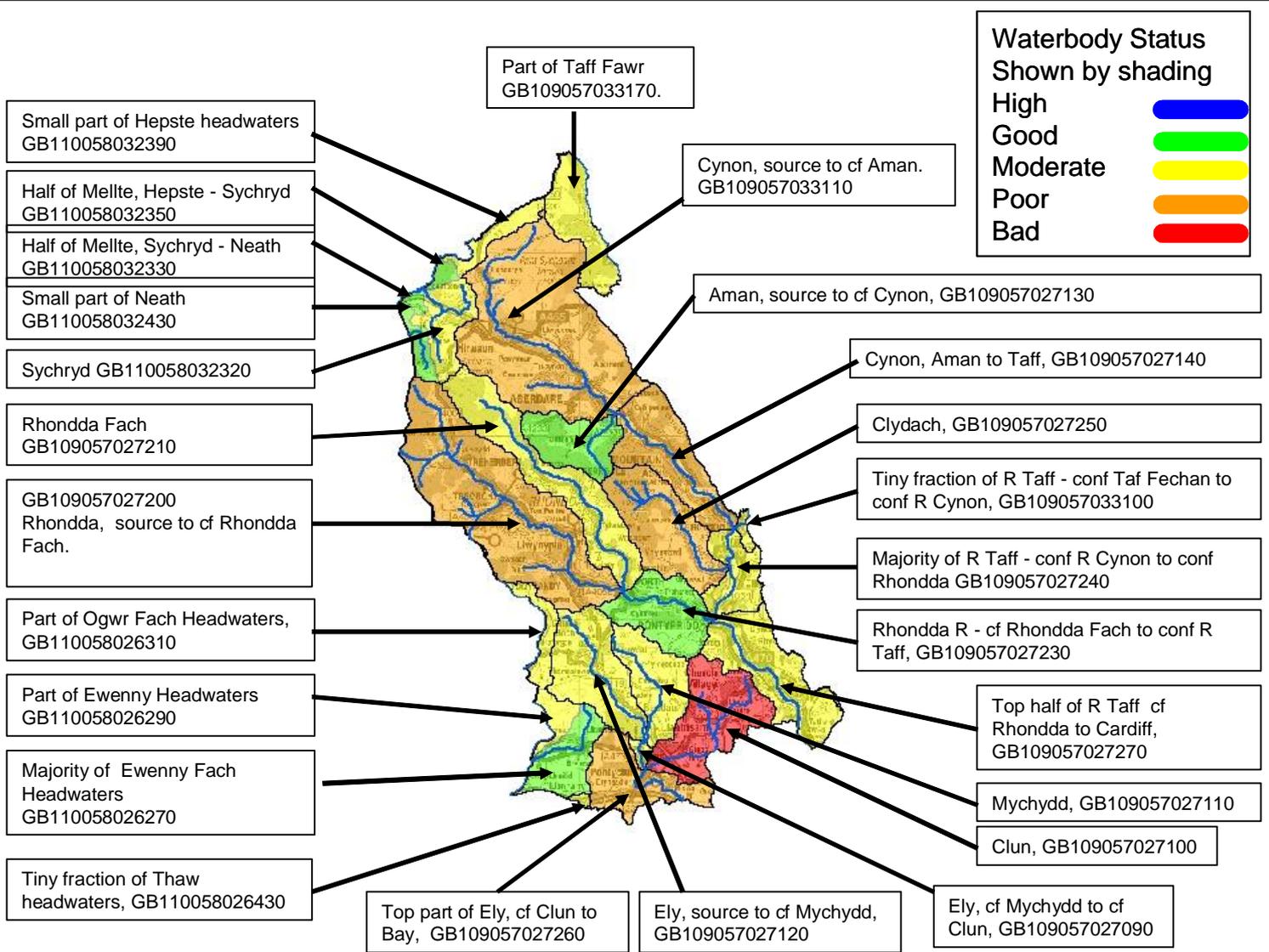


# Summary of Water Framework Directive Status within Rhondda Cynon Taff Local Authority Boundary

Please note that the boundary of RCT spans across the South East and South West Environment Agency boundary and crosses many WFD waterbody boundaries, therefore a rough indication of the proportion of the waterbody within RCT has been provided.

## Rivers



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### 1. Introduction

The information contained below is a summary of the Water Framework Directive Status of the waterbodies within Rhondda Cynon Taff.

In section 2 below, we have included the strategic and non-strategic site allocations that fall within each waterbody.

In section 3, and for ease of reference, we have summarised the information with regards to the strategic sites.

### 2. Summary of WFD status of waterbodies within RCT

Please note, specific pressures relating to the waterbodies below have been highlighted [blue](#):

#### **GB110058032320: Sychryd** **Waterbody Status: Moderate** **Failing Elements: Fish**

The waterbody is failing its fish classification, recent surveys have shown improvement, the fish classification is expected to improve. However, there are some issues on the Camnant, the [Sewage](#) Treatment Works is currently being investigated, there are concerns locally that the works maybe at [capacity](#), South-East Area need to be aware of this and consult the South West on any Planning applications that may increase the pressure on this works.

#### **Sites**

NSA14.2: North of Fifth Avenue, Hirwaun Ind. Estate, Hirwaun.

#### **GB110058026270: Ewenny Fach Headwaters (majority of waterbody)** **Waterbody Status: Good**

The waterbody is currently achieving Good Ecological Status. However the waterbody maybe at [risk of deterioration](#), problematic [CSO](#)'s are currently being investigated.

#### **Sites**

SSA9 &

SSA15.2: Former OCC site, Llanilid, Llanharan

SSA10.11: Land south of Brynna Road, Brynna

SSA10.12: Land east of Dolau County Primary School, Bryncae

**GB109057027210; Rhondda Fach****Waterbody Status: Moderate****Failing Elements: Fish**

Is classed as a [heavily modified waterbody](#) on the basis of Flood Protection and Urbanisation pressures. Therefore we will need to attain Good Ecological 'Potential' (as opposed to status) which means we will need to maximise the ecology given the modified nature of the waterbody. Currently looking at tackling partial [obstructions to fish](#) migration.

**Sites**

- NSA4: Former Maerdy Colliery site, Rhondda Fach
- NSA9.12: Land rear of Maerdy Road, Maerdy
- NSA9.13: Land at Gwernllwyn Terrace, Tylorstown
- NSA9.14: Site off Fenwick Street, Pontygwaith

**GB109057027200; Rhondda, source to cf Rhondda Fach****Waterbody Status: Poor****Failing Elements: Fish**

Currently looking at tackling partial [obstructions to fish](#) migration. Localised pressure on invertebrates which are Moderate at Tonypany, possibly associated with [CSO's](#), several of which have recently been improved under AMP4.

**Sites**

- NSA5: Former Fernhill Colliery site, Blaenrhondda
- NSA9.15: Old Hospital site and school playground, Treherbert
- NSA9.16: Land at the end of Ynysfeio Avenue, Treherbert
- NSA9.17: Site at the end of Mace Lane, Treorchy
- NSA9.18: Site off Cemetery Road, Treorchy
- NSA9.19: Hospital site, Llwynypia
- NSA9.20: Land at Park St, Clydach Vale
- NSA9.21: Land at Dinas Road / Graig Ddu Road, Dinas
- NSA9.22: Land at Catherine Crescent, Cymmer
- NSA14.1: Ferndale & Highfield Ind. Estate, Maerdy
- NSA14.4: Cae Mawr Industrial Estate.

**GB109057027260; Ely, conf Clun to Cardiff Bay,(top part of waterbody)****Waterbody Status: Poor****Failing Elements: Phytobenthos\*, Fish, Benzo's\*\***

\*Phytobenthos = diatoms, a type of phytoplankton (microscopic plants) that can be used as an indicator of water quality pressures including those associated with nutrient enrichment.

\*\* Benzo's = Polyaromatic Hydrocarbons, which are products of combustion.

The Fish within this part of the waterbody are currently at Good Ecological status. The Phytobenthos and Benzo failures are lower down the waterbody outside of the RCT boundary. There are localised pressures on [water quality](#) as shown by the moderate invertebrates just outside the RCT boundary (cause unknown).

**Sites**

- SSA8: Mwyndy / Talbot Green
- SSA10.13: West of Llechau, Llanharry

### **GB109057027120; Ely, source to conf Mychydd**

**Waterbody Status: Moderate**

**Failing Elements: Fish**

Fish failures need to be investigated. There are also localised issues with Poor phosphate status downstream of the [sewage](#) treatment works at Duffryn Isaf despite nutrient removal for UWWTD already present at the works.

#### **Sites**

- SSA10.2: Trane Farm, Tonyrefail
- SSA10.3: Collenna Farm, Tonyrefail
- SSA10.4: Bryngolau, Tonyrefail
- SSA10.5: Site of the former Hillside Club, Capel Hill, Tonyrefail
- SSA10.6: Land east of Mill St, Tonyrefail
- SSA10.7: Land at Gwern Heulog, Coed Ely
- SSA10.8: Land rear of Tylcha Wen Terrace, Tonyrefail
- SSA10.9: Land part of Tylcha Ganol Farm, south of Mill St, Tonyrefail
- SSA10.10: Land east of Hafod Wen and North of Concorde Drive
- SSA14.2: Coed Ely, Tonyrefail.

### **GB109057027100; Clun**

**Waterbody Status: Bad**

**Failing Elements: Fish, Invertebrates**

This waterbody is under severe pressure being having been frequently polluted from [industrial](#), [sewage](#) treatment works, [misconnections](#) and [CSO](#) sources. Currently there is also a risk of [sediment](#) from by-pass construction.

#### **Sites**

- SSA7: Former Cwm Colliery & Coking works
- SSA8: Mwyndy / Talbot Green
- SSA10.14: Penygawsi, Llantrisant
- SSA10.15: Land south of Brynteg Court, Beddau
- SSA10.16: The Link Site, Pen-yr-eglwys, Church Village
- SSA10.19: Land south of the ridings, Tonteg and east of Station Road

### **GB109057027110; Mychydd**

**Waterbody Status: Moderate**

**Failing Elements: Fish**

Fish failures need to be investigated.

#### **Sites**

- SSA7: Former Cwm Colliery & Coking Works, Pontypridd.
- SSA14.1: South of Llantrisant Business Park, Llantrisant

### **GB109057027270; Taff, from conf Rhondda to Cardiff, (top half of waterbody)**

**Waterbody Status: Moderate**

**Failing Elements: Phytobenthos\*, Invertebrates, Benzo's\*\***

\*Phytobenthos = diatoms, a type of phytoplankton (microscopic plants) that can be used an indicator of water quality pressures including those associated with nutrient enrichment.

\*\* Benzo's = Polyaromatic Hydrocarbons, which are products of combustion.

Is classed as a [heavily modified waterbody](#) on the basis of Flood Protection, Urbanisation and 'Wider Environment' pressures. Therefore we will need to attain Good Ecological 'Potential' (as opposed to status) which means we will need to maximise the ecology given the modified nature of the waterbody. The Phytobenthos, invertebrate and Benzo failures are lower down the waterbody outside of the RCT boundary.

#### **Sites**

SSA10.17: Glyntaff Farm, Rhydyfelin

SSA14.3: Land south of Gellihirion Ind. Estate, Pontypridd.

#### **GB109057027230; Rhondda R, from conf Rhondda Fach to conf R Taff**

##### **Waterbody Status: Good**

Although not failing overall there are all localised impacts on [water quality](#) as shown by the moderate invertebrate status on the Rhondda in Porth (cause unknown).

#### **Sites**

SSA10.18: Gelliwion Reclamation, Pontypridd.

#### **GB109057027250; Clydach**

##### **Waterbody Status: Poor**

##### **Failing Elements: Fish**

Currently looking at tackling [obstructions to fish](#) migration and fish failures need to be investigated. In the past there have been issues from Old Parish Rd [industrial](#) estate which led to a drainage investigation and pollution prevention campaign.

There is pressure on [water resources](#) with 1 large abstraction in this waterbody

#### **Sites**

SSA10.1: Cefn Lane, Glyncoch

#### **GB109057027140; Cynon, from conf Aman to Taff Clydach**

##### **Waterbody Status: Poor**

##### **Failing Elements: Fish**

Currently looking at tackling [obstructions to fish](#) migration and fish failures need to be investigated. Although not failing overall there are all localised impacts on [water quality](#) as shown by the moderate invertebrate status on the Cynon at Abercynon, [CSO's](#) are at least part of the problem with some work due under AMP4.

#### **Sites**

NSA6: Former Phurnacite Plant, Abercwmboi

NSA9.11: Gwernifor Grounds, Mountain Ash.

NSA17.1: Land at Oxford St, Mountain Ash.

**GB109057027130; Aman, from source to conf Cynon**  
**Waterbody Status: Good**

**Sites**

NSA9.10: Land to the end of Godreaman St, Godreaman

**GB109057033110; Cynon, source to conf Aman**  
**Waterbody Status: Poor**

**Failing Elements: Fish**

Currently looking at tackling [obstructions to fish](#) migration and fish failures need to be investigated. Although not failing overall there are localised impacts on [water quality](#) as shown by the moderate invertebrate status on the Cynon at Robertstown, [CSO's](#) are at least part of the problem with some work due under AMP4.

There is pressure on [water resources](#) with 1 large abstraction in this waterbody

**Sites**

NSA6: Former Phurnacite Plant, Abercwmboi  
NSA7: Land at Robertstown  
NSA8: Land South of Hirwaun  
NSA9.1: Land south of Rhigos Road, Hirwaun  
NSA9.2: Land east of Trenant, Penywaun  
NSA9.3: Land south east of Llwydcoed Community Centre  
NSA9.4: Old Brickworks, old dairy and tipped land rear of Birchwood  
NSA9.5: Tegfan Farm, Potters Field, Trecynon  
NSA9.6: Land at Nant y Wenallt, Abernant  
NSA9.7: Land bordered by Cefnpennar Road and Phillip Row, Cwmbach  
NSA9.8: Dyffryn Row, Cwmbach  
NSA9.9: Remainder of Ynyscynon Farm, Cwmbach  
NSA9.10: Land to the end of Godreaman St, Godreaman  
NSA14.3: Land at Former Mayhew Chicken Factory, Trecynon

**GB109057033170; Taff Fawr (part of waterbody)**

**Waterbody Status: Moderate**

**Failing Elements: Fish**

Is classed as a [heavily modified waterbody](#) on the basis of Water Storage. Therefore we will need to attain Good Ecological 'Potential' (as opposed to status) which means we will need to maximise the ecology given the modified nature of the waterbody. Currently looking at tackling [obstructions to fish](#) migration and fish failures need to be investigated.

**GB109057027900; Ely, from conf Mychydd to conf Clun**

**Waterbody Status: Moderate**

**Failing Elements: Phosphate**

Phosphate failure due to Dyffryn Isaf [Sewage](#) Treatment Works in the waterbody upstream, despite already having nutrient removal for UWWTD.

**GB109057033100; Taff, conf Taf Fechan to conf Cynon (tiny fraction at bottom end of waterbody)**

**Waterbody Status: Moderate**

**Failing Elements: Fish**

Is classed as a [heavily modified waterbody](#) on the basis of Flood Protection, Urbanisation and 'Wider Environment' pressures. Therefore we will need to attain Good Ecological 'Potential' (as opposed to status) which means we will need to maximise the ecology given the modified nature of the waterbody. Currently looking at tackling [obstructions to fish](#) migration and fish failures need to be investigated.

**GB110058032390; Hepste headwaters (Small part of waterbody)**

**Waterbody Status: Moderate**

**Failing Elements: Fish**

The waterbody is failing its fish classification, only one site was assessed, it is only slightly under its Trout expectation, and is likely to be a borderline failure. There are issues with [water resources](#) - the river has natural sink holes and is known to dry up.

**GB110058032350; Mellte, from Hepste to Sychryd (half of waterbody)**

**Waterbody Status: Good**

**GB110058032330; Mellte, from Sychryd to R. Neath (half of waterbody)**

**Waterbody Status: Good**

**GB110058032430; Neath, from conf with Nedd Fechan and Mellte to TL (small part of waterbody)**

**Waterbody Status: Good**

Comments: There is pressure on [water resources](#) with 2 large abstractions in this waterbody – for the Neath and Tennant, both Licensed (or partially exempt). The waterbody is currently achieving Good Ecological Status.

**GB110058026310 - Ogwr Fach Headwaters, (part of waterbody)**

**Waterbody Status: Moderate**

**Failing Elements: Fish**

Comments: The waterbody is failing its fish classification, the Ogmore is a recovering river, and has low but increasing populations of Salmon. One potential partial [fish barrier](#) is known. There may also be some [water quality](#) issues in the catchment with a potentially problematic [CSO](#) and possible [misconnections](#) will be investigated.

**GB110058026290; Ewenny - headwaters to conf with the Ewenny Fach**

**Waterbody Status: Moderate**

**Failing Elements: Fish, Phosphate**

Comments: The waterbody is failing for fish and Phosphate. The fish failure appears to be borderline. Possible problems with the [sewage infrastructure](#) is suspected and will be investigated.

**GB110058026430; Thaw headwaters (very small part of waterbody)**

**Waterbody Status: Moderate**

**Failing Elements: Fish, Phosphate**

Comments: Fish failures need to be investigated. The phosphate failure is largely due to the [sewage](#) treatment works situated lower down this waterbody at Cowbridge outside of the RCT boundary.

**GB109057027240; Taff, from conf R Cynon to conf Rhondda (majority of waterbody)****Waterbody Status: Moderate****Failing Elements: Fish**

Comments: Currently looking at tackling [obstructions to fish](#) migration and fish failures need to be investigated.

**3. Waterbody status and failing elements of Strategic Sites**

Summarised below are the waterbody status and failing areas local to the strategic sites:

**NSA4: Former Maerdy Colliery site, Rhondda Fach**

Waterbody Status: Moderate

Failing Elements: Fish

**NSA5: Former Fernhill Colliery site, Blaenrhondda**

Waterbody Status: Poor

Failing Elements: Fish

**NSA6: Former Phurnacite Plant, Abercwmboi**

Waterbody Status: Poor

Failing Elements: Fish

**NSA7: Land at Robertstown**

Waterbody Status: Poor

Failing Elements: Fish

**NSA8: Land South of Hirwaun**

Waterbody Status: Poor

Failing Elements: Fish

**SSA7: Former Cwm Coking Colliery & Coking Works**

Waterbody Status: Bad

Failing Elements: Fish, Invertebrates

**SSA8: Mwyndy / Talbot Green**

Waterbody Status: Poor

Failing Elements: Phytobenthos\*, Fish, Benzo's\*\*

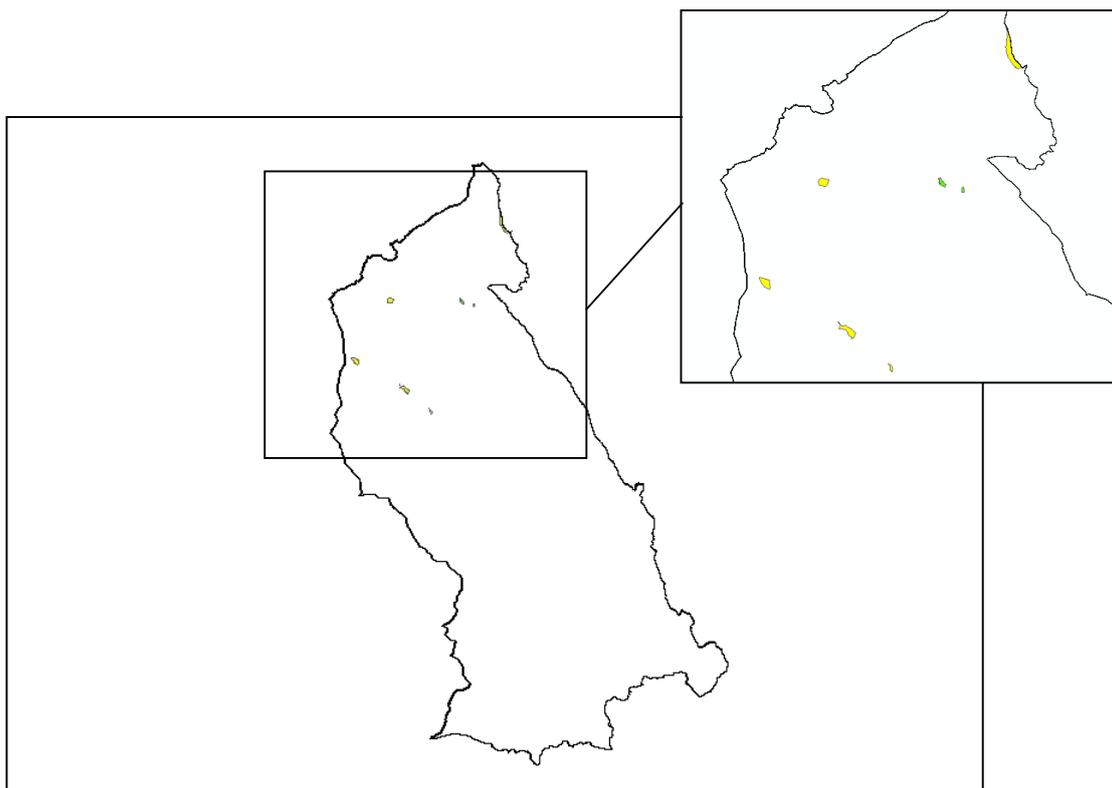
\*Phytobenthos = diatoms, a type of phytoplankton (microscopic plants) that can be used an indicator of water quality pressures including those associated with nutrient enrichment.

\*\* Benzo's = Polyaromatic Hydrocarbons, which are products of combustion.

**SSA9: Former OCC site, Llanilid, Llanharan**

Waterbody Status: Good

#### 4. Lakes within RCT



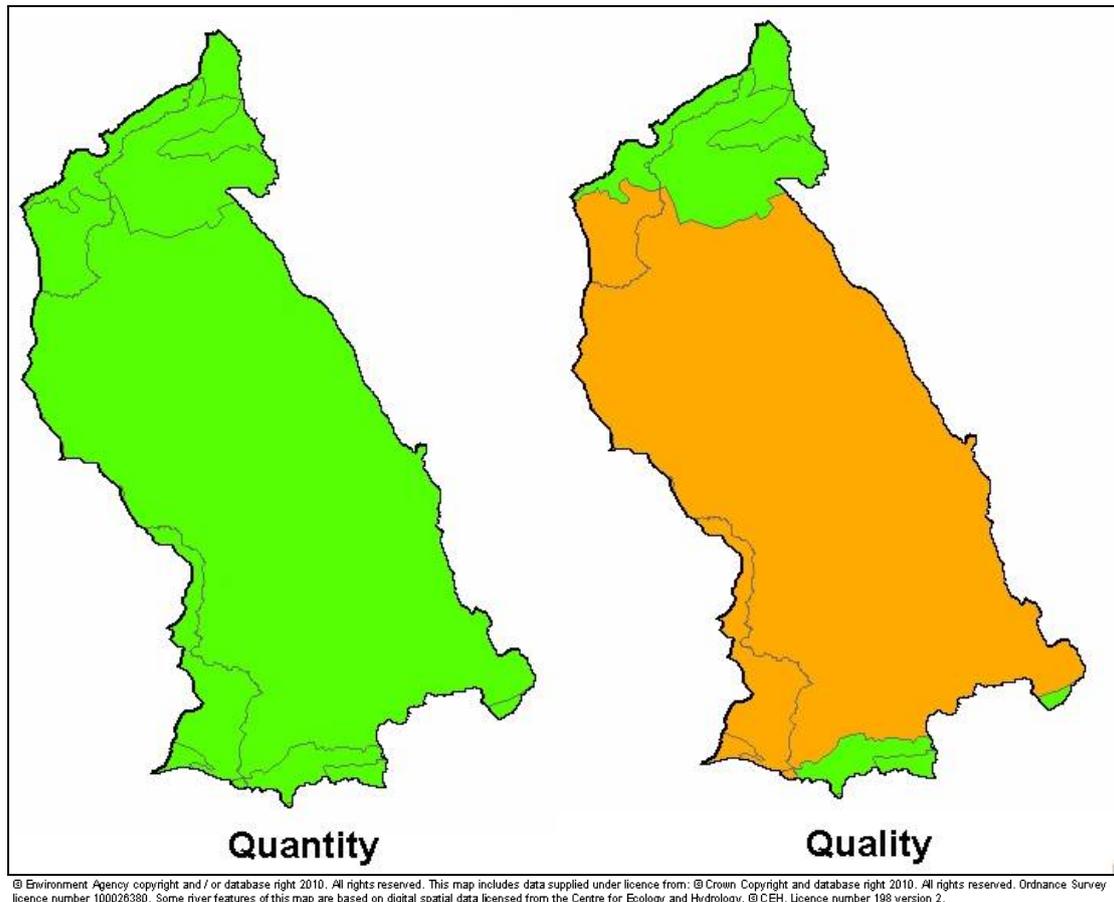
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EA_WB_ID	NAME	WATER_CAT	ECO_CLASS
GB31040990	Penderyn Reservoir	Lake	Moderate
GB31041219	Llyn Fawr	Lake	Moderate
GB30940648	Llwyn-on Reservoir	Lake	Moderate
GB30940987	Nant-moel Reservoir	Lake	Good
GB30941017	Nanthir Reservoir	Lake	Good
GB30941303	Lluest-wen Reservoir	Lake	Moderate
GB30941377	Castell Nos Reservoir	Lake	Moderate

There are seven WFD lake waterbodies within RCT. All are Artificial/Heavily Modified and therefore require a 'Good Ecological Potential' assessment. Currently all except Llwyn-On have been assessed on 'expert judgement' alone.

**GB30940648, Llwyn-on Reservoir** is moderate status for phosphate and copper. Investigations are required.

## 5. Groundwater quality and quantity within RCT



While groundwater quantity is fine, the quality is being flagged as Poor for its potential to impact upon surface water quality.

As stated in the SEA of the Deposit Plan (p186), in places, the natural groundwater flow regime has been disrupted as a result of historical mining activities. Complex flow patterns have evolved along the shafts and adits of the old mineworkings. Iron-rich groundwaters are known to emerge from the old mineworkings at various locations in the area, some causing significant pollution problems.

Groundwater protection is an issue that needs to be considered.