

Specific pressures relating to these water bodies have been highlighted blue in the following text.

GB109057027270; Lower half of R Taff - conf Rhondda R to Castle Street

Water body Status: **Moderate**

Failing Elements: **Benzo(a)pyrene***, **Benzo (a) and (k) fluoranthene***, **Fluoranthene***, **Mit_Assmnt****

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

** Mit_Assmnt is the Mitigation Measures assessment which relates to water bodies that are classed as Artificial / Heavily Modified

Comments: This water body is classed as a **Heavily Modified Water Body** on the basis of the influence of **Flood protection** and **Urbanisation**. Therefore we will need to attain Good Ecological 'Potential' (as opposed to status) which means we will need to put in place measures that maximise the ecology given the modified nature of the water body. The Benzo's / Fluoranthene could be from many **sources of combustion** – industry/ domestic/transport.

The lower River Taff has had pressure from **organic nutrients / sewage** with **combined sewer overflows / misconnections** and **industrial estates** the likely pressures. There are known **barriers to fish migration** in this water body.

GB109057027260; Part of Ely, conf Nant Clun to Cardiff Bay.

Water body Status: **Bad**

Failing Elements: **Benzo(a)pyrene***, **Fish**, **Fluoranthene***, **Invertebrates**, **Tributyltin**

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

Comments: The Benzo's / Fluoranthene could be from many **sources of combustion** – industry/ domestic/transport. The source of the tributyl tin remains **unknown**. The invertebrates and fish fauna have been impacted by **pollution incidents** from unknown sources likely to originate from the Clun catchment upstream.

Likely pressures are from **nutrients from Sewage Treatment Works** (DCWW to investigate), **organic pollution** and **combined sewer overflows / misconnections** and **industrial estates**. There are known **barriers to fish migration** in this water body.

GB109057027080; Nant Dowlais

Water body Status: **Moderate**

Failing Elements: **Fish**

Comments: Fish failure is due to **diffuse agri (siltation)** and **poor habitat**.

Phosphate has not been assessed, but when it is, it is expected to fail due to a combination of **Sewage Treatment Works** (DCWW to investigate) and **diffuse agricultural** sources.

GB109057027100; Part of Clun

Water body Status: **Poor**

Failing Elements: **Fish, Invertebrates.**

Comments: In recent years this water body has been polluted from a number of sources; **Sewage Treatment Works** (recent improvement works have taken place), **Combined Sewer Overflows** and **misconnections**, plus pollution incidents from **unknown sources**.

GB109057027220; Whitchurch Brook

Water body Status: **Moderate**

Failing Elements: **Fish, Mit_Assmnt***, **Phosphate**

* Mit_Assmnt is the Mitigation Measures assessment which relates to water bodies that are classed as Artificial / Heavily Modified

Comments: This water body is classed as a **heavily modified water body** on the basis of **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 water body. The phosphate failure is likely from **urban** and **misconnection** pressures.

GB109057027160; Nant Glandulas**Water body Status: Moderate****Failing Elements: Fish, Hydrology, Diatoms*, (and Mit_Assmnt**)**

*Diatoms are microscopic plants that indicate nutrient enrichment.

** Mit_Assmnt is the Mitigation Measures assessment which relates to water bodies that are classed as Artificial / Heavily Modified

Comments: This water body should be classed as a [heavily modified water body](#) on the basis of drinking water supply ([water storage/ impoundment releases/transfer](#)), [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 water body. There are known [water resources](#) issues in this water body which have the potential to cause damage to the environment at low flows.

GB109057027280; Bottom part of Rhymney, confluence Nant Cylla to Chapel Wood**Water body Status: Moderate****Failing Elements: Benzo(a)pyrene*, Benzo (a) and (k) fluoranthene*, Benzo (ghi) perelyene and indeno (123-cd) pyrene*, Fluoranthene***

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

Comments: The benzo's could be from many [sources of combustion](#) – industry/ domestic/transport.

GB109057026770; Rhosog Fach Reen**Water body Status: Moderate****Failing Elements: Macrophyte (plants), Mit_Assmnt***

* Mit_Assmnt is the Mitigation Measures assessment which relates to water bodies that are classed as Artificial / Heavily Modified

Comments: This water body is classed as an [artificial water body](#) on the basis of the influence of [land drainage](#) and [wider environment](#) (takes account of Gwent Levels SSSI). 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 water body. There may be pressures from [diffuse agricultural](#) sources.

GB109057027150; Roath Brook**Water body Status: Moderate****Failing Elements: Inverts, Macrophytes (plants), Mit_Assmnt*, Phosphate, Diatoms****

* Mit_Assmnt is the Mitigation Measures assessment which relates to water bodies that are classed as Artificial / Heavily Modified

** Diatoms are microscopic plants that indicate nutrient enrichment.

Comments: This water body is classed as a [heavily modified water body](#) on the basis of [drinking water supply](#), [urbanisation](#) and [wider environment](#) (takes account of Lisvane Reservoir SSSI). 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 water body.

Likely water quality pressures are from [combined sewer overflows / misconnections](#).

GB70910006; Whitchurch Canal**Water body Status: Moderate****Failing Elements: Mit_Assmnt***

* Mit_Assmnt is the Mitigation Measures assessment which relates to water bodies that are classed as Artificial / Heavily Modified

Comments: This water body is classed as an [artificial water body](#). 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 water body.

GB30947042; Cardiff Bay**Water body Status: Moderate****Failing Elements: Mit_Assmnt***

* Mit_Assmnt is the Mitigation Measures assessment which relates to water bodies that are classed as Artificial / Heavily Modified

Comments: This water body is classed as a [heavily modified water body](#) on the basis of [flood protection](#), [water regulation](#), [urbanisation](#), [recreation and navigation](#). 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 water body.

GB530905415401; small part of Severn Estuary Lower

Water body Status: Moderate

Failing Elements: Angiosperms (saltmarsh), Mit_Assmnt*, Brominated diphenylether (BDPE) Calc, Mercury and Its Compounds

* Mit_Assmnt is the Mitigation Measures assessment which relates to water bodies that are classed as Artificial / Heavily Modified

Comments: This water body is classed as a [heavily modified water body](#) on the basis of [flood protection](#). 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 water body.

The saltmarsh responds to morphological pressures – [coastal squeeze](#).

Mercury is likely [historic industrial inputs](#) as we have reports back to 1991 that show elevated levels.

BDPE = Brominated Diphenylether is a flame retardant, production ceased 1996, use prohibited in EU since 2004. It is found in Sewage Treatment Works, the pathway is furniture foam to clothes to washing water to STW. It's likely no further action just wait for all sources to be replaced over time.