Water body information sheet for water body 5102 in Tweed

General details

Water body name: Whiteadder Water (Whiteadder Reservoir dam to Dye Water

confluence)

Water body Identifier code: 5102

Length: 8.25 km

Water body category: River

River basin district: Solway Tweed

Area advisory group: Tweed

Catchment: Whiteadder Water

Associated protected Whiteadder Water - FRESHWATER FISH (EXISTING)

areas: River Tweed - SPECIAL AREA OF CONSERVATION

River Tweed - SSSI

Associated groundwater: Whiteadder Valley

Responsible body: SEPA

Borders

Heavily modified: Yes
Artificial: No

Typology: Mid-altitude

Small Siliceous

National Grid Reference: NT 69369 61951

Latitude: 55.84978 Longitude: -2.4908 Water body information sheet for water body 5102 in Tweed

Current status of this water body

Classification results are updated annually, as part of SEPA's commitment to monitor and assess the condition of the environment.

Once the classification is agreed, as part of river basin management planning, the pressures and measures for every water body are reviewed to ensure that they reflect this improved understanding of the environment. Objectives are reviewed as part of the six yearly planning cycle and any proposed changes to objectives will be presented in the draft river basin plans http://sepa.org.uk/water/river_basin_planning.aspx.

This worksheet was produced using the most up to date classification results but the measures, pressures and objectives shown may not yet align to these classification results. Please contact rbmp@sepa.org.uk if you require further information on this water body.

We have classified this water body as having an overall status of Good ecological potential with Medium confidence in 2012 with overall ecological status of Bad and overall chemical status of Pass.

It is important to note that the five classification ecological potential classes for Heavily Modified Water Bodies (HMWBs) and Artificial Water Bodies (AWBs) combine the level of mitigation measures for water levels and flow and physical habitat with measurements of the biological and chemical water quality. For example, a HMWB could have all the mitigation measures in place to allow it to reach good ecological potential e.g. a fish pass installed on a dam required for hydropower generation, but if water quality is poor due to elevated phosphorus levels, its overall ecological potential assessment could be moderate, poor or bad depending on the severity of the impact.

The overall classification of status is made up of many different tiers of classification data. A complete set of classification data for 2012 is shown at the end of this document.

Targets for the future status of this water body

We have set environmental objectives for this water body over future river basin planning cycles in order that sustainable improvements to its status can be made over time, or alternatively that no deterioration in status occurs, unless caused by a new activity providing significant specified benefits to society or the wider environment.

For this water body we have set the overall environmental objectives for the first, second and third River Basin Management Planning (RBMP) cycles as:

Year	2012	?	?	?
Status	Good ecological potential	?	?	?
Year	2012	2015	2021	2027
Status	Good ecological potential	Pass	Pass	Pass

Pressures and measures on this water body

We have established an ongoing programme of monitoring in order to identify pressures on our water bodies.

The pressures listed below contribute to this water body's failure to meet good ecological status or potential. River basin planning allows us to plan improvements for particular parameters over time. We have collaborated with others to identify measures which will act to protect or improve our water environment in order that all water bodies reach good status over successive RBMP cycles.

The following table shows our collated information on the pressures on this water body, their causes and the measures which could be introduced to mitigate their effects. We have also indicated the current funding status of the measure; with projected measures being potentially funded and agreed measures having funding in place. Finally, we have included information on the potential or actual owner of the measure, the date it will be effective and information on the justification for extending the deadlines or for setting an alternative objective, where appropriate.

Pressure	As a Result of	Assessment Parameter	Objective	Reasons for Failure
	Measure	Funding	Owner	Effective date
Flow Regulation	Water collection, purification and distribution Impounding weir / dam	Change from natural glow conditions	Good by 2015	
	Provide appropriate baseline flow regime downstream of impoundment	Agreed	Scottish Water	31/03/2014

Footnote – These results show current classification but the measures, pressures and objectives shown may not yet align to these classification results. Please contact rbmp@sepa.org.uk if you require further information on this water body.

Future work

Additional work to identify pressures and to develop and implement measures to mitigate their impacts will continue over subsequent river basin cycles.

Complete classification for this water body in 2012

Parameter	Status	Confidence of Class
OVERALL STATUS	GOOD ECOLOGICAL POTENTIAL	MEDIUM
Pre-HMWB status	Bad	Medium
Overall chemistry	Pass	Low
Priority substances	Pass	Low
Overall ecology	Bad	Medium
Physico-Chem	High	Low
Temperature	High	Low
Soluble reactive phosphorus	High	Low
рН	High	Low
Dissolved Oxygen	High	Low
Biological elements	High	Medium
Phytobenthos	High	Low
Macrophytes	High	Low
Benthic invertebrates	High	Low
Macro-invertebrates (acid)	High	Low
Macro-invertebrates (RiCT)	High	Low
Macro-invertebrates (ASPT)	High	Low
Macro-invertebrates (NTAXA)	High	Low
Alien species	High	Low
Fish	High	Medium
Fish ecology	High	Low
Fish barrier	High	Medium
Specific pollutants	Pass	Low

Parameter	Status	Confidence of Class	
Hydromorphology	Bad	Medium	
Morphology	Good	Medium	
Hydrology	Bad	Medium	
Hydrology (impoundment)	Bad	Medium	
Hydrology (abstraction)	Bad	Medium	
Regulatory BOD	High	Low	
Regulatory ammonium	High	Low	
Water quality	High	Low	
Morphological pressures	Good	Medium	

Location of this water body

You can find the geographical location of this water body by searching on water body ID in the interactive maps at www.sepa.org.uk/water/river_basin_planning.aspx



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