RBMP Water body information sheet for water body 100220 in Tay

General details

Water body name:	Loch Tummel
Water body Identifier code:	100220
Area:	5.79 km^2
Water body category:	Lake
Baseline:	Y
River basin district:	Scotland
Area advisory group:	Tay
Catchment:	River Tay
Associated protected areas:	River Tay - SPECIAL AREA OF CONSERVATION
Associated groundwater:	Garry and Loch Rannoch bedrock and localised sand and gravel aquifers
Responsible body:	SEPA Perth
Heavily modified:	Yes
Artificial:	No
Typology:	Lowland Large Low alkalinity Deep
National Grid Reference:	NN 82012 59335
Latitude:	56.71074
Longitude:	-3.92903

Current status of this water body

We have classified this water body as having an overall status of Good ecological potential with Medium confidence in 2008 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 for the use (eg hydropower) to allow it to reach good ecological potential, 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.

This overall classification of status is made up of many different tiers of classification data. A complete set of classification data for 2008 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	2008	2015	2021	2027
Status	Good ecological potential	Good	Good	Good

The current status of the water body meets the requirements of the Water Framework Directive, thus we must ensure that no deterioration from good status occurs, unless caused by a new activity providing significant specified benefits to society or the wider environment.

Pressures and measures on this water body

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**
Morphological Alterations	Production of renewable electricity (NB nuclear and pumped hydro are not renewable forms of electricity	Single pressure - Shore	Good by 2015	

Pressure	As a Result of	Assessment Parameter	Objective	Reasons for Failure
	Measure	**Funding**	**Owner**	**Effective date**
	generation) Impounding - weir / dam			
	Improvement to condition of channel/ bed and/or banks/ shoreline	Agreed	Scottish and Southern Energy	31/12/2007
Abstraction	Production of renewable electricity (NB nuclear and pumped hydro are not renewable forms of electricity generation)	Change in the outflow from the lake	Good by 2015	
	Control pattern/ timing of abstraction (Hands off flow/ utilisation of storage (new/existing)	Agreed	Scottish and Southern Energy	31/12/2007
Flow Regulation	Production of renewable electricity (NB nuclear and pumped hydro are not renewable forms of electricity generation)	Change in the outflow from the lake	Good by 2015	
	Appropriate management of rate and range of artificial drawdown	Agreed	Scottish and Southern Energy	31/12/2007
Morphological Alterations	Production of renewable electricity (NB nuclear and pumped hydro are not renewable forms of electricity generation)	Fish passage	Good by 2015	
	Removal of barriers or provision of mechanisms to enable fish migration	Agreed	Scottish and Southern Energy	31/12/2007

Future work

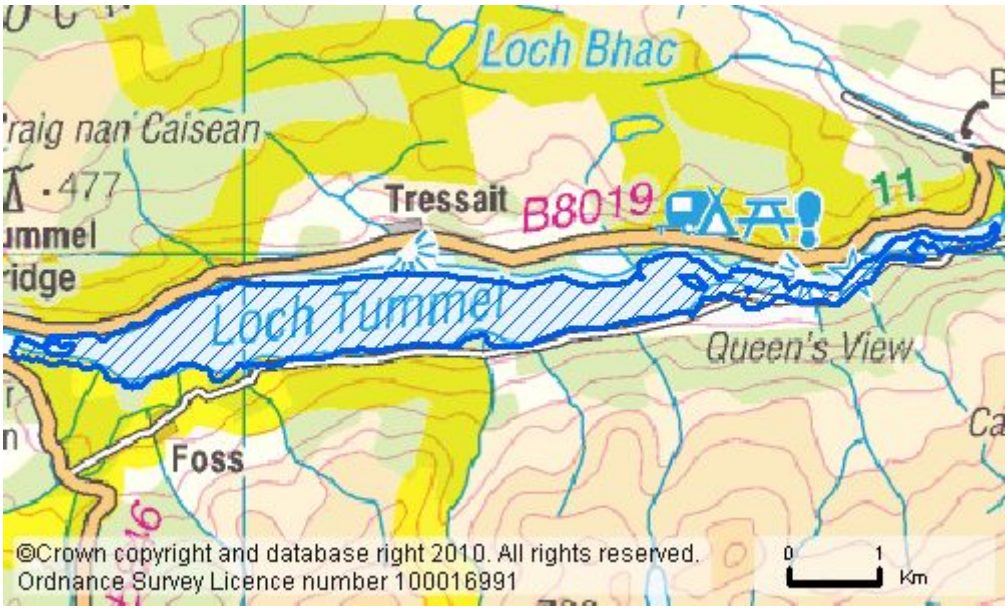
Additional work to identify pressures and to develop and implement measures to mitigate their impacts will continue over subsequent river basin cycles.

Complete classification for this water body in 2008

Parameter	Status	Confidence of Class
OVERALL STATUS	GOOD ECOLOGICAL POTENTIAL	MEDIUM
Pre-HMWB status	Bad	Medium
Overall chemistry	Pass	Low
Priority substances	Pass	Low
Lead	Pass	Low
Overall ecology	Bad	Medium
Physico-Chem	High	High
Dissolved Oxygen	High	Low
Total Phosphorus	High	Medium
Salinity	High	High
Acid Neutralising Capacity	High	Low
Biological elements	Moderate	High
Phytobenthos	High	Medium
Macrophytes	High	Low
Benthic invertebrates	Moderate	High
Macro-invertebrates (acid)	Moderate	High
Macro-invertebrates (CPET)	High	Low
Alien species	High	Low
Fish barrier	High	Low
Phytoplankton	High	High
Chlorophyll a	High	High
Cyanobacteria	High	Medium
Specific pollutants	Pass	High
Ammonium	Pass	High
Hydromorphology	Bad	Medium
Morphology	Moderate	Medium
Hydrology	Bad	Medium
Water quality	Moderate	
Morphological pressures	Moderate	

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



SEPA Contact Details: rbmp@sepa.org.uk