

RBMP Water body information sheet for water body 100316 in Clyde

General details

Water body name:	Loch Bradan
Water body Identifier code:	100316
Area:	2.15 km ²
Water body category:	Lake
Baseline:	Y
River basin district:	Scotland
Area advisory group:	Clyde
Catchment:	Water of Girvan
Associated protected areas:	Loch Bradan - DRINKING WATER PROTECTION ZONE
Associated groundwater:	Newton Stewart bedrock and localised sand and gravel aquifers
Responsible body:	SEPA Ayr
Heavily modified:	Yes
Artificial:	No
Typology:	Mid-altitude Large Low alkalinity Deep
National Grid Reference:	NX 42399 97360
Latitude:	55.24518
Longitude:	-4.48059

Current status of this water body

We have classified this water body as having an overall status of Moderate ecological potential with Medium confidence in 2008 with overall ecological status of Poor 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.

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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	Moderate ecological potential	Moderate	Good	Good

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. 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.

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
Flow Regulation	Water collection, purification and	Change in the outflow from the lake	Good by 2015	

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Pressure	As a Result of	Assessment Parameter	Objective	Reasons for Failure
	Measure	Funding	Owner	Effective date
	distribution Impounding - weir / dam			
	Provide appropriate baseline flow regime downstream of impoundment	Projected	Scottish Water	31/12/2007
Abstraction	Water collection, purification and distribution	Change in the outflow from the lake	Good by 2015	
	Control Abstraction	Neither Agreed nor Projected	Scottish Water	31/12/2007
Diffuse Source Pollution	Forestry Intensive use - cultivating / planting to the bank	Phosphorus	Moderate by 2015	Implementation of the measure by an earlier deadline would impose disproportionate burdens
	Reduce at source	Projected	Forestry Commission Scotland	31/12/2020
Morphological Alterations	Water collection, purification and distribution	Fish passage	Good by 2015	
	Removal of barriers or provision of mechanisms to enable fish migration	Neither Agreed nor Projected	Scottish Water	31/12/2007
Morphological Alterations	Water collection, purification and distribution	Single pressure - Shore	Good by 2015	
	Improve Modified Habitat	Neither Agreed nor Projected	Scottish Water	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.

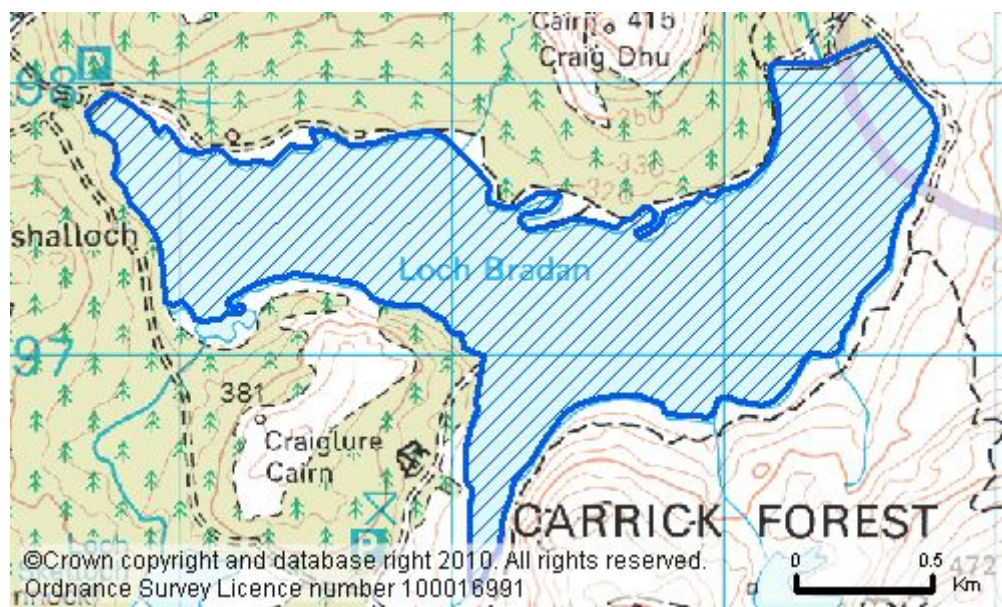
Complete classification for this water body in 2008

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

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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