General details

Water body name: Loch Venachar

Water body Identifier code: 100266 Area: 3.83 km²

Water body category: Lake Baseline: Y

River basin district: Scotland
Area advisory group: Forth

Catchment: River Forth

Associated protected Loch Venachar - DRINKING WATER PROTECTION ZONE

areas: River Teith - SPECIAL AREA OF CONSERVATION

Associated groundwater: Doune bedrock and localised sand and gravel aquifers

Responsible body: SEPA

Stirling

Heavily modified: Yes Artificial: No

Typology: Lowland

Large

Low alkalinity

Deep

National Grid Reference: NN 57174 05703

Latitude: 56.22237 Longitude: -4.30505

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 Moderate 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	Moderate ecologic	:Magad eentte al	Moderate	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
Morphological Alterations	Water collection, purification and	Single pressure - Open Water (pelagic/ sub-littoral)	Moderate by 2015	Implementation of the measure by an earlier deadline

Pressure	As a Result of	Assessment Parameter	Objective	Reasons for Failure
	Measure	Funding	Owner	Effective date
	distribution Impounding - weir / dam	g		would impose disproportionate burdens
	Improve Modified Habitat	Neither Agreed nor Projected	Scottish Water	31/03/2024
Morphological Alterations	Water collection, purification and distribution Impounding - weir / dam	Single pressure - Shore	Moderate by 2015	Implementation of the measure by an earlier deadline would impose disproportionate burdens
	Improvement to condition of channel/ bed and/or banks/ shoreline	Neither Agreed nor Projected	Scottish Water	31/03/2024
Flow Regulation	Water collection, purification and distribution	Change in the outflow from the lake	Moderate by 2015	Implementation of the measure by an earlier deadline would impose disproportionate burdens
	Provide appropriate baseline flow regime downstream of impoundment	Projected	Scottish Water	31/12/2007
Morphological Alterations	Forestry Intensive use - management of riparian vegetation	Single pressure - Shore	Moderate by 2015	Implementation of the measure by an earlier deadline would impose disproportionate burdens
	Improvement to condition of riparian zone and/or wetland habitats	Agreed	Forestry Commission Scotland	31/12/2020
Abstraction	Water collection, purification and distribution	Change in the outflow from the lake	Moderate by 2015	Implementation of the measure by an earlier deadline would impose disproportionate burdens
	Control Abstraction	Neither Agreed nor Projected	Scottish Water	31/03/2024

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

Parameter	Status	Confidence of Class
Water quality	Good	
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



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