

Water body information sheet for water body 3701 in Forth

General details

Water body name:	Murray Burn
Water body Identifier code:	3701
Length:	9.97 km
Water body category:	River
River basin district:	Scotland
Area advisory group:	Forth
Catchment:	Water of Leith
Associated protected areas:	Water of Leith - FRESHWATER FISH (EXISTING) Murray Burn - UWWTD SENSITIVE AREA (EXISTING)
Associated groundwater:	Edinburgh
Responsible body:	SEPA Edinburgh & Lothians
Heavily modified:	Yes
Artificial:	No
Typology:	Lowland Small Calcareous
National Grid Reference:	NT 18002 69326
Latitude:	55.91002
Longitude:	-3.31328

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 Poor ecological potential with Medium confidence in 2012 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 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:

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Year	2012	?	?	?
Status	Poor ecological potential	?	?	?
Year	2012	2015	2021	2027
Status	Poor 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
Diffuse Source Pollution	Sewage disposal	Ammonia	Poor by 2015	Implementation of the measure by an earlier deadline would impose disproportionate burdens
	Reduce diffuse sources from built development	Projected	Scottish Water	31/03/2024
Point Source Pollution	Sewage disposal	Phosphorus	Moderate by 2015	Implementation of the measure by an earlier deadline would impose disproportionate burdens

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Pressure	As a Result of	Assessment Parameter	Objective	Reasons for Failure
	Measure	Funding	Owner	Effective date
	Reduce at source	Projected	Scottish Water	31/03/2024
	Reduce at source	Agreed	Scottish Water	08/06/2012
Morphological Alterations		Multiple Pressure	Poor 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	City of Edinburgh Council	31/12/2020
Point Source Pollution	Sewage disposal	Ammonia	Poor by 2015	Implementation of the measure by an earlier deadline would impose disproportionate burdens
	Reduce at source	Projected	Scottish Water	31/03/2024
	Reduce at source	Agreed	Scottish Water	08/06/2012
Morphological Alterations		Fish passage	Good by 2015	
	Removal of barriers or provision of mechanisms to enable fish migration	Projected	Landowner(s)	31/12/2010
Point Source Pollution	Sewage disposal	Unknown Organics	Poor by 2015	Implementation of the measure by an earlier deadline would impose disproportionate burdens
	Reduce Point Source Inputs	Projected	Scottish Water	31/03/2024
	Reduce at source	Agreed	Scottish Water	08/06/2012
Diffuse Source Pollution	Sewage disposal	Unknown Organics	Poor by 2015	Implementation of the measure by an earlier deadline would impose disproportionate burdens
	Reduce diffuse sources from built development	Projected	Scottish Water	31/12/2026
Point Source Pollution	Sewage disposal	Phosphorus	Moderate by 2015	Implementation of the measure by

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Pressure	As a Result of	Assessment Parameter	Objective	Reasons for Failure
	Measure	Funding	Owner	Effective date
				an earlier deadline would impose disproportionate burdens
	Reduce at source	Projected	Scottish Water	31/03/2025
Point Source Pollution	Sewage disposal	Dissolved Oxygen	Not yet set	
	Reduce Point Source Inputs	Projected	Scottish Water	31/03/2025

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

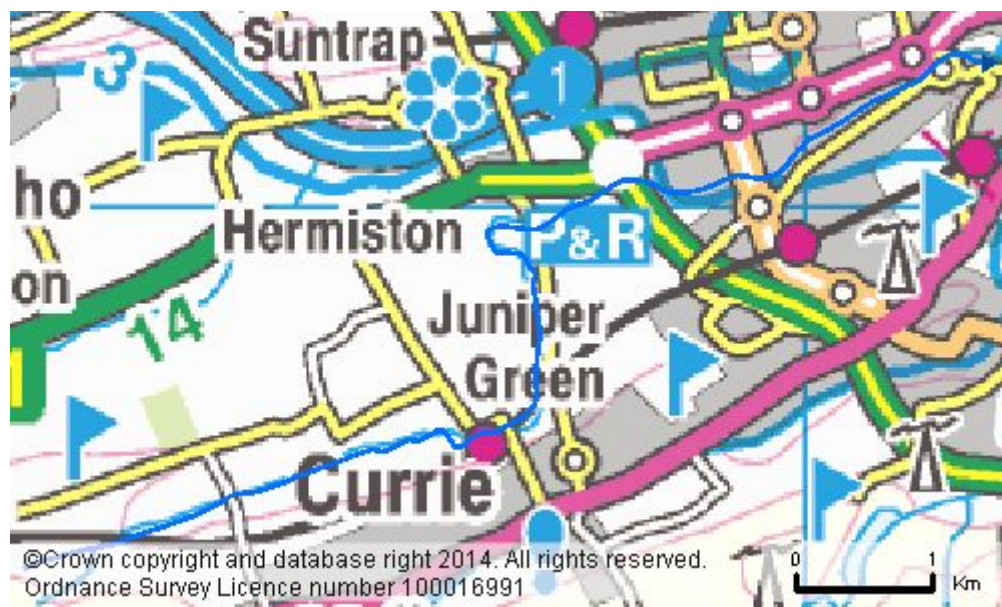
Parameter	Status	Confidence of Class
OVERALL STATUS	POOR ECOLOGICAL POTENTIAL	MEDIUM
Pre-HMWB status	Poor	Medium
Overall chemistry	Pass	Low
Priority substances	Pass	Low
Overall ecology	Poor	Medium
Physico-Chem	Moderate	High
Temperature	High	High
Soluble reactive phosphorus	Moderate	High
pH	High	High

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Parameter	Status	Confidence of Class
Dissolved Oxygen	Good	High
Biological elements	Poor	Medium
Phytobenthos	Moderate	High
Macrophytes	High	Low
Benthic invertebrates	Moderate	Medium
Macro-invertebrates (acid)	High	Low
Macro-invertebrates (RiCT)	Moderate	Medium
Macro-invertebrates (ASPT)	Moderate	Medium
Macro-invertebrates (NTAXA)	High	High
Alien species	High	Low
Fish	Poor	Medium
Fish ecology	High	Low
Fish barrier	Poor	Medium
Specific pollutants	Fail	High
Ammonium	Fail	High
Hydromorphology	Poor	Medium
Morphology	Poor	Medium
Hydrology	High	Medium
Hydrology (impoundment)	High	Medium
Hydrology (abstraction)	High	Medium
Regulatory BOD	Good	Medium
Regulatory ammonium	Moderate	Medium
Water quality	Moderate	High
Morphological pressures	Poor	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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