General details

| Water body name: | River Ayr (d/s Greenock Water) |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Water body Identifier code: | 10420 |
| Length: | 46.41 km |
| Water body category: | River |
| River basin district: | Scotland |
| Area advisory group: | Clyde |
| Catchment: | River Ayr |
| Associated protected areas: | Howford Bridge - SSSI River Ayr (d/s Greenock Water) - UWWTD SENSITIVE AREA (EXISTING) River Ayr - FRESHWATER FISH (EXISTING) Stairhill - SSSI |
| Associated groundwater: | Mauchline |
| | |
| Responsible body: | SEPA Ayr |
| Responsible body: Heavily modified: | |
| | Ayr |
| Heavily modified: | Ayr No |
| Heavily modified: Artificial: | Ayr No No Mid-altitude Medium |
| Heavily modified: Artificial: Typology: | Ayr No No Mid-altitude Medium Calcareous |

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 with High confidence in 2012 with overall ecological status of Poor and overall chemical status of Pass.

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 | 2015 | 2021 | 2027 |
|--------|------|----------|----------|------|
| Status | Poor | Moderate | Moderate | Good |
| Year | 2012 | 2015 | 2021 | 2027 |
| Status | Poor | 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 | Livestock farming | Phosphorus | Moderate by 2015 | Implementation of the measure by an earlier deadline would impose disproportionate burdens |
| | Non-urban land management measures | Projected | Farmer(s) | 31/12/2014 |
| Point Source Pollution | Sewage disposal | Phosphorus | Moderate by 2015 | Implementation of the measure by an earlier deadline would impose disproportionate burdens |
| | Reduce at source | Projected | Scottish Water | 31/03/2014 |
| Abstraction | Water collection, purification and distribution | Depletion of base flow from GW body | Good by 2015 | |
| | Improve water efficiency (e.g. abstraction matches need) or reduce need | Agreed | Farmer(s) | 31/12/2014 |
| Abstraction | Production of renewable electricity (NB nuclear and pumped hydro are not renewable forms of electricity generation) | Change from natural flow conditions | Good by 2015 | |

| Pressure | As a Result of | Assessment Parameter | Objective | Reasons for Failure |
|-----------------------------|-----------------------------------|-------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------|
| | Measure | Funding | Owner | Effective date |
| | Control Abstraction | Neither Agreed nor Projected | Landowner(s) | 31/12/2014 |
| Point Source | Sewage disposal | Dissolved Oxygen | High by 2015 | |
| Pollution | Reduce at source | Agreed | Scottish Water | 31/03/2014 |
| Point Source | Sewage disposal | Ammonia | High by 2015 | |
| Pollution | Ilution Increase treatment | Agreed | Scottish Water | 31/03/2014 |
| Diffuse Source Pollution | | Phosphorus | Moderate by 2015 | Implementation of the measure by an earlier deadline would impose disproportionate burdens |
| | Retrofit/improve existing SUDS | Projected | Owner Not Yet Agreed | 31/12/2014 |
| Diffuse Source Pollution | | UK Specific pollutants (Annex 8) | Not yet set | |

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 | HIGH |
| Pre-HMWB status | Poor | High |
| Overall chemistry | Pass | High |

| Parameter | Status | Confidence of Class |
|------------------------------|--------|---------------------|
| Priority substances | Pass | High |
| Benzo-a-pyrene | Pass | High |
| Anthracene | Pass | High |
| Atrazine | Pass | Low |
| Benzo-(B+K)-Fluoranthene | Pass | High |
| Cadmium | Pass | High |
| Chlorpyrifos | Pass | Low |
| Fluoranthene | Pass | High |
| Hexachlorobenzene | Pass | Low |
| Isoproturon | Pass | High |
| Lead | Pass | High |
| Naphthalene | Pass | High |
| Nickel | Pass | High |
| pp-DDT | Pass | Low |
| Simazine | Pass | Low |
| Trifluralin | Pass | Low |
| Endosulfan | Pass | Low |
| Total HCH | Pass | Low |
| Diethylhexylphthalate (DEHP) | Pass | High |
| Chlorfenvinphos | Pass | Low |
| Total Drins | Pass | Low |
| Diuron | Pass | High |
| Mercury | Pass | Low |
| Total DDT | Pass | Low |
| Overall ecology | Poor | High |
| Physico-Chem | Good | High |
| Temperature | Good | Medium |
| Soluble reactive phosphorus | Good | High |
| рН | High | High |
| Dissolved Oxygen | High | High |
| Biological elements | Poor | High |
| Phytobenthos | Poor | High |
| Macrophytes | High | High |
| Benthic invertebrates | Good | High |

| Parameter | Status | Confidence of Class | |
|-----------------------------|--------|---------------------|--|
| Macro-invertebrates (acid) | High | Low | |
| Macro-invertebrates (RiCT) | Good | High | |
| Macro-invertebrates (ASPT) | Good | High | |
| Macro-invertebrates (NTAXA) | High | High | |
| Alien species | High | Low | |
| Fish | High | Medium | |
| Fish ecology | High | Low | |
| Fish barrier | High | Medium | |
| Specific pollutants | Pass | High | |
| Arsenic | Pass | High | |
| Diazinon | Pass | Low | |
| Linuron | Pass | High | |
| Permethrin | Pass | Low | |
| Iron | Pass | High | |
| Copper | Pass | High | |
| Zinc | Pass | High | |
| Dimethoate | Pass | Low | |
| 2,4-D | Pass | High | |
| Месоргор | Pass | High | |
| Ammonium | Pass | High | |
| Chromium | Pass | High | |
| Hydromorphology | Good | Medium | |
| Morphology | Good | Medium | |
| Hydrology | Good | Medium | |
| Hydrology (impoundment) | Good | Medium | |
| Hydrology (abstraction) | Good | Medium | |
| Regulatory BOD | High | High | |
| Regulatory ammonium | High | High | |
| Water quality | Poor | High | |
| 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 <u>www.sepa.org.uk/water/river_basin_planning.aspx</u>



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