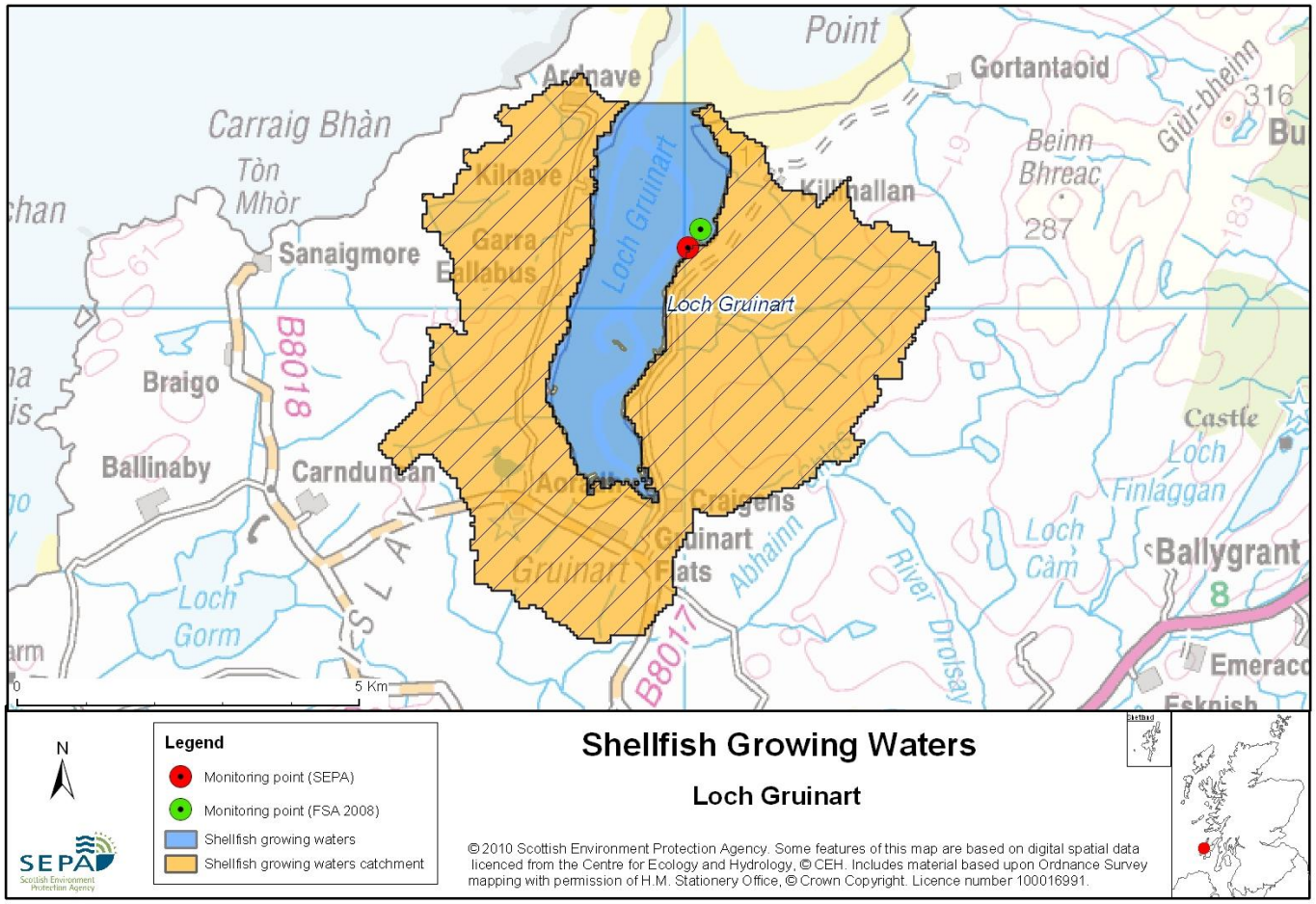
74 Loch Gruinart



Name	Loch Gruinart
Report Reference Number	74
WFD Code	UKS7992374
Local Information	An area south of a line drawn between NR2917673000 and NR3039573000, and extending to MHWS.
Designated Area (km²)	7.75
Year of Designation	2002
Sampling Points	Loch Gruinart at Cnuic Na Croise, Islay (Biota) - NR 30058 70893
Commencement of Monitoring	2003

74.1 Commercial Shellfish Interests

Part of Loch Gruinart is also designated as a Shellfish Harvesting Area by the Food Standards Agency (FSA) for the production of Pacific oysters (*Crassostrea gigas*).

Islay: Loch Gruinart Craigens
2011 = B - April to December
2012 = A - January to March

Category A sites are of the highest standard and means that shellfish can go directly for human consumption however category B requires that shellfish must be depurated, heat-treated or re-laid prior to human consumption.

FSA have completed a sanitary survey for Islay: Loch Gruinart Craigens (including Loch Gruinart).

For more information on Food Standards Agency Classification please visit:
http://www.food.gov.uk/scotland/safetyhygienescot/shellmonitorscot/shellclassesscot/

74.2 Bathymetric Information

Loch Gruinart has a northerly aspect so is sheltered from prevailing south-westerly winds. It has a total length of 6.2km and a maximum water depth of 8m. There are no basins in this loch and Loch Gruinart has a rapid flushing time of 1 day. The catchment area is relatively small, at 41km2. The fresh/tidal flow ratio is 0.1, indicative of a low fresh water influence on the loch. There are no morphological pressures on the waters.

74.3 Conservation Designations

RAMSAR – Bridgend Flats, Islay
Designated 14/07/1988 for internationally important aggregations of non-breeding birds - Greenland Barnacle goose (*Branta leucopsis*)

RAMSAR – Gruinart Flats, Islay
Designated 14/07/1988 for internationally important aggregations of non-breeding birds - Greenland Barnacle goose (*Branta leucopsis*), Greenland white-fronted goose (*Anser albifrons flavirostris),* Light-bellied Brent goose (Branta bernicla *hrota*),

RAMSAR – Rinns of Islay
Designated 27/11/1995 for internationally important aggregations of non-breeding birds - Greenland white-fronted goose (*Anser albifrons flavirostris*), Whooper swan (*Cygnus cygnus*). Breeding bird assemblage and upland blanket bog.

Special Protected Area (SPA) – Bridgend Flats, Islay
Designated 14/07/1988 for internationally important aggregations of non-breeding birds - Greenland Barnacle goose (*Branta leucopsis*)
This is also a **Water Dependent SPA**

Special Protected Area (SPA) – Gruinart Flats, Islay
Designated 01/09/2006 internationally important aggregations of non-breeding birds - Chough (*Pyrrhocorax pyrrhocorax*), Greenland Barnacle goose (*Branta leucopsis*), Greenland white-fronted goose (*Anser albifrons flavirostris*), Light-bellied Brent goose (*Branta bernicla hrota*) and aggregations of breeding birds - Chough (*Pyrrhocorax pyrrhocorax*)
This is also a **Water Dependent SPA**

Special Protected Area (SPA) – Rinns of Islay
Designated 27/11/1995 for internationally important aggregations of non-breeding birds - Chough (*Pyrrhocorax pyrrhocorax*), Greenland white-fronted goose (*Anser albifrons flavirostris*), Whooper swan (*Cygnus cygnus*). And aggregations of breeding birds - Chough (*Pyrrhocorax pyrrhocorax*), Common scoter (*Melanitta nigra*), Corncrake (*Crex crex*), Hen harrier (*Circus cyaneus*),
This is also a **Water Dependent SPA** and a **Groundwater Dependent SPA**

Special Area of Conservation (SAC) – Rinns of Islay
Designated 17/03/2005 for internationally important butterfly species - fritillary butterfly (*Euphydryas (Eurodryas, Hypodryas) aurinia*)
This is also a **Water Dependent SAC** and a **Groundwater Dependent SAC**

Special Area of Conservation (SAC) – Glac na Criche
Designated 17/03/2005 for internationally important butterfly species - fritillary butterfly (*Euphydryas (Eurodryas, Hypodryas) aurinia*)
And habitat – Upland Blanket Bog, dry heaths, vegetated sea cliffs
This is also a **Water Dependent SAC**

Special Area of Conservation (SAC) – Feur Lochain
Designated 17/03/2005 for Acid peat-stained lakes and ponds, upland blanket bogs, upland depressions on peat substrates
This is also a **Water Dependent SAC** and a **Groundwater Dependent SAC**

Sites of Special Scientific Interest (SSSI) – Rinns of Islay
Designated 08/04/1987 for aggregations of breeding birds (Chough (Pyrrhocorax pyrrhocorax), Hen harrier (Circus cyaneus), Corncrake (Crex crex)), aggregations of non-breeding birds (Greenland Barnacle goose (Branta leucopsis), Greenland white-fronted goose (Anser albifrons flavirostris)), Beetle assemblage, Upland Blanket Bog, Supralittoral coastal sediment (Machair), Coastal Geomorphology of Scotland

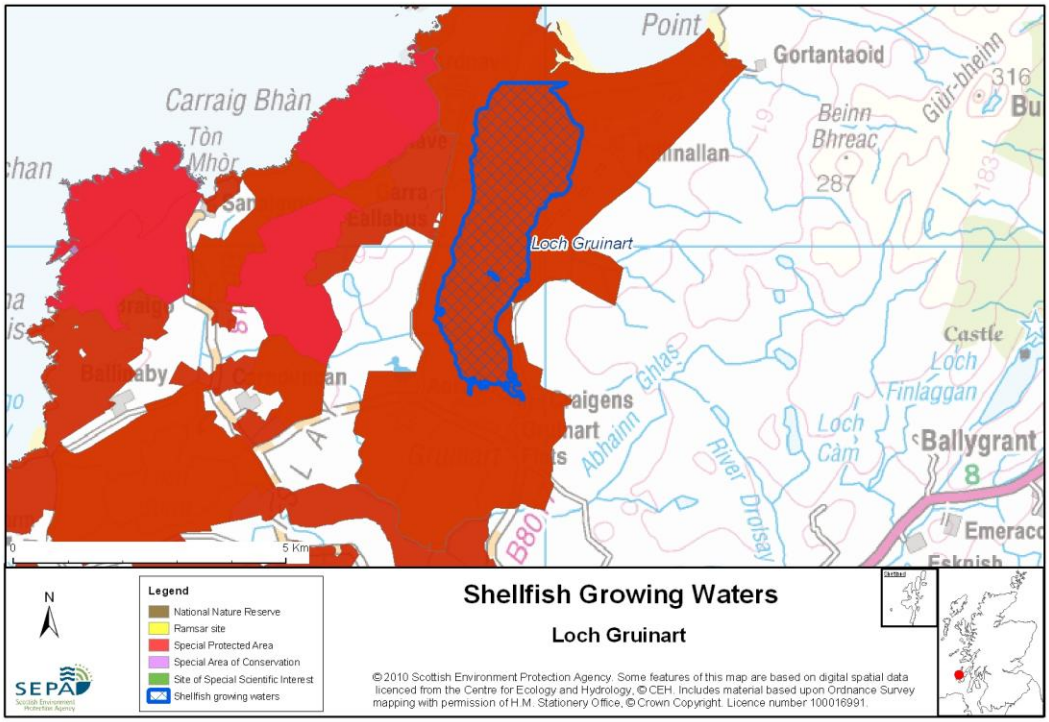
Sites of Special Scientific Interest (SSSI) – Glac na Criche
Designated 11/11/1983 for aggregations of breeding birds (Chough (*Pyrrhocorax pyrrhocorax*)), Structural and metamorphic geology (Dalradian), Upland Blanket Bog

Sites of Special Scientific Interest (SSSI) – Bridgend Flats
Designated 11/11/1983 for Bridgend Flats, aggregations of non-breeding birds (Greenland Barnacle goose (*Branta leucopsis*)), saltmarsh, sandflat

Sites of Special Scientific Interest (SSSI) – Gruinart Flats
Designated 24/11/1983 for aggregations of breeding birds (Chough (*Pyrrhocorax pyrrhocorax*)), aggregations of non-breeding birds (Chough (*Pyrrhocorax pyrrhocorax*), Greenland Barnacle goose (*Branta leucopsis*), Greenland white-fronted goose (*Anser albifrons flavirostris*), Light-bellied Brent goose (*Branta bernicla hrota*)), Coastal Geomorphology of Scotland, Structural and metamorphic geology (Dalradian), Upland Blanket Bog, Lichen assemblage, mudflats

Sites of Special Scientific Interest (SSSI) – Feur Lochain - Moine nam Faoileann
Designated 20/07/1984 for aggregations of non-breeding birds (Greenland white-fronted goose (*Anser albifrons flavirostris*)), upland blanket bog

Sites of Special Scientific Interest (SSSI) –
Rubh' a' Mhail to Uamhannan Donna Coast
Designated 28/02/1990 for Coastal Geomorphology of Scotland, Quaternary geology and geomorphology of Scotland, Structural and metamorphic geology (Dalradian)



74.4 Topography and Land Use – Potential Diffuse Pollution Sources

The catchment that drains to the designated water has numerous small watercourses, is low lying and extends to approximately 35 square kilometres. The land is productive and the three known farms in the area are in beef and sheep production, two of them having authorisations for the disposal of spent sheep dip.

The biological impact on receiving waters of run-off from fields grazed by cattle and sheep is unknown, although the potential for diffuse pollution run-off is significant.

The land on the eastern side of Islay is predominantly acid-grassland with some patches of neutral grassland, improved grassland and open heath. The western side of the loch comprises of improved and neutral grassland, open heath and some patches of bog inland.

There are no significant communities and the area is very sparsely populated, however, the area is popular with ornithologists

The most likely reason for guideline faecal coliform failures (see 74.7 Compliance History below) is diffuse source pollution from either Livestock farming and/or sewage disposal. If this shellfish water continues to fail it may be necessary to carry out bacterial source tracking studies to verify the origin of the diffuse pollution.

74.5 Point Source Discharge

There are no consented discharges from public sewage works to the designated water or to the watercourses within the catchment. There are a number of registered private septic discharges from septic tanks along the western shore of Loch Gruinart, only one of which is to water, the Abhainn a Mhuillin. The other discharges are soakaways.

There are no fish farms and no known industrial discharges within the designated area, or within 2kms of the designated area.

74.6 Compliance Monitoring Regime

The following monitoring regime of the designated area was implemented in July 2005.

Year	Monitoring Regime
2005 -	• Quarterly for Sal, DO, pH, temperature, visible oil • Every third year for metals and organohalogens in mussels, next collection scheduled for 2011 • Quarterly for faecal coliforms in mussels

74.7 Compliance History

UKS7992374 - Loch Gruinart				
	Compliance history for Waters and Biota, excluding faecal coliforms data			Compliance history for faecal coliforms
Year	Overall Result	Imperative	Guideline	Guideline
2003	Pass	Pass	Pass	Fail
2004	Pass	Pass	Pass	Fail
2005	Pass	Pass	Pass	Fail
2006	Pass	Pass	Pass	Fail
2007	Pass	Pass	Pass	Fail
2008	Pass	Pass	Pass	Fail
2009	Pass	Pass	Pass	Fail
2010	Pass	Pass	Pass	Fail

The waters have failed to comply with the Guideline standard for faecal coliforms since monitoring began in 2003.

74.8 Future Monitoring

The monitoring regime (74.6 Compliance Monitoring Regime) will be followed. In the event of any chemistry parameter failing to meet any EQS, the site will be revisited and resampled for the failed parameter.

Samplers are asked to identify any evidence of visible harm to the shellfish population at the site.

74.9 Improvement Actions

There are currently no improvement actions planned for this designated Shellfish Water.

WFD Objectives

Under the Water Framework Directive, the target objectives expect this shellfish water to Pass by 2015 (first River Basin Management Plan Cycle) for Imperative Shellfish Growing Water Standards, with high confidence.

The Guideline Shellfish Growing Water Standards are not predicted to pass until 2027 (third River Basin Management Plan Cycle). This is due to the repeated failures of the Guideline faecal coliform standards. Target objectives may be revised after the first River Basin Management Plan Cycle.

Objective	First Cycle 2015	Confidence	Second Cycle 2021	Confidence	Third Cycle 2027	Confidence
Imperative Shellfish Growing Waters Standard	Pass by 2015	High	Pass by 2021	High	Pass by 2027	High
Guideline Shellfish Growing Waters Standard	Fail by 2015	Low	Fail by 2021	Low	Pass by 2027	Low

74.10 Summary of Actions

Action	Deadline
No improvement actions currently planned	N/A