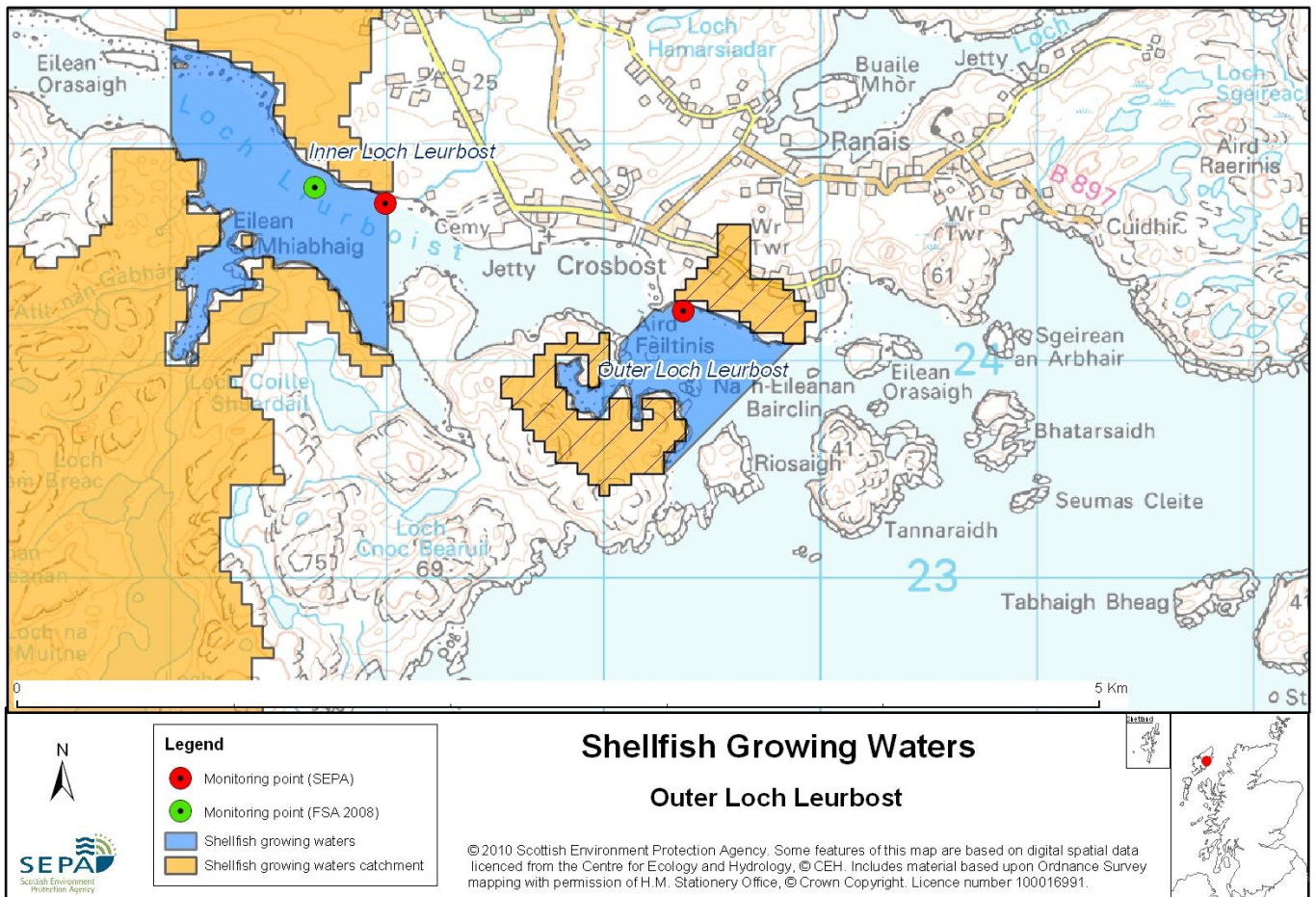


79 Outer Loch Leurbost



| Name | Outer Loch Leurbost |
|------------------------------------|--|
| Report Reference Number | 79 |
| WFD Code | UKS7992379 |
| Local Information | An area bounded by lines drawn between NB3906924069 and NB3923624236 (Aird Feiltinis) and between NB3928923489 and NB3987124071 and extending to MHWS. |
| Designated Area (km ²) | 0.33 |
| Year of Designation | 2002 |
| Sampling Points | Loch Leurbost East 58 Mussel Site - NB 39367 24225 |
| Commencement of Monitoring | 2003 |

79.1 Commercial Shellfish Interests

This designated shellfish water is also designated by the Food Standards Agency (FSA) as a Shellfish Harvesting Area, for the production of common mussels (*Mytilus edulis*) from three areas (Creag an Rainich, Eilean Mhiabhaig, Loch Leurbost) all of which are classified as below.

Loch Leurbost (Common mussels)
2011 = A - April to December
2012 = A - January to March

Loch Leurbost: Crosbost has two sites for the production of Pacific Oysters (*Crassostrea gigas*), both of which are Class B.

Loch Leurbost: Crosbost (Pacific oysters)
2011 = B - April to June
A - July 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 not carried out a sanitary survey for this area

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

79.2 Bathymetric Information

The outer section of Loch Leurbost (formerly Loch Leurbost (East)) is smaller having only a length of approximately 0.7km and extends eastwards from Crosbost to Na h-Eileanan Bairclin. As with the Inner section the topography of the land would provide substantial shelter from wind. The catchment area for the whole loch is 26km² and has a rapid flushing time of 1 day. The fresh/tidal flow ratio of 8 and the salinity reduction of 0.3ppt suggest low freshwater input. There are no morphological pressures on the waters.

79.3 Conservation Designations

Part of Outer Loch Leurbost Shellfish Waters is also designated as a Shellfish Harvesting Area by the Food Standards Agency (FSA).

To the west of Outer Loch Leurbost Shellfish Waters is Inner Loch Leurbost ([UKS7992378](#)) which is also a designated FSA Shellfish Harvesting Area.

South of this is a FSA Shellfish Harvesting Area at Loch Eireasort

RAMSAR – [Lewis Peatlands](#)

Designated 07/12/2000 for habitat (upland blanket bog) and internationally important breeding bird species (including Dunlin (*Calidris alpina schinzii*))

Special Protected Area (SPA) – [Lewis Peatlands](#)

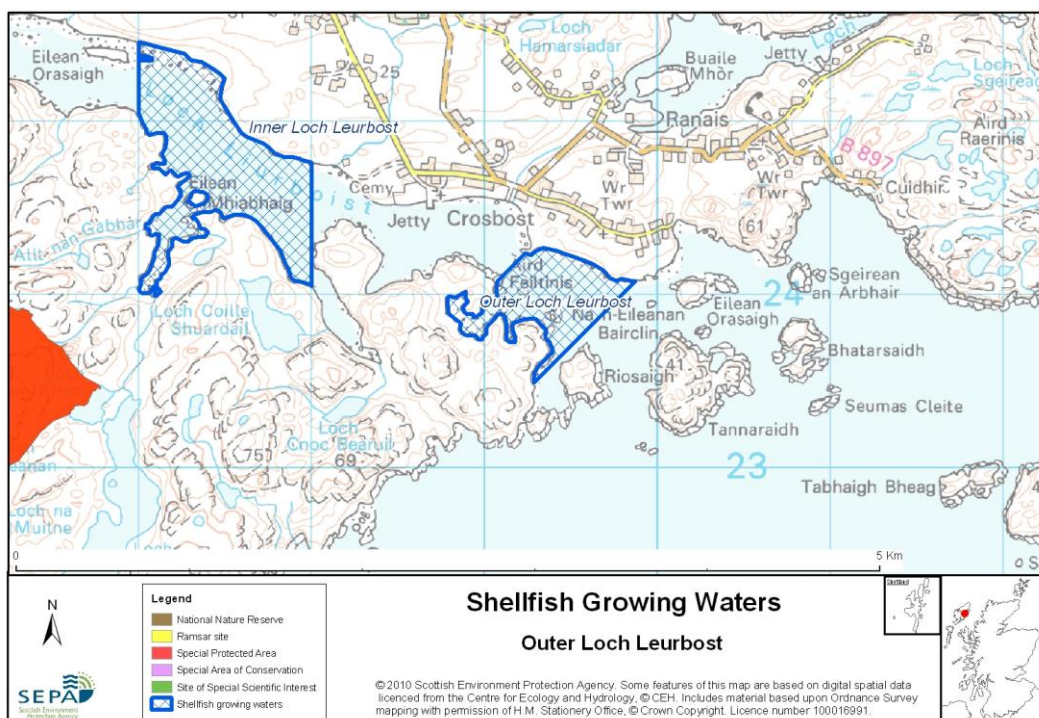
Designated 07/12/2000 for internationally important breeding bird species - Black-throated diver (*Gavia arctica*), Dunlin (*Calidris alpina schinzii*), Golden eagle (*Aquila chrysaetos*), Golden plover (*Pluvialis apricaria*), Greenshank (*Tringa nebularia*), Merlin (*Falco columbarius*), Red-throated diver (*Gavia stellata*).

Special Area of Conservation (SAC) – [Lewis Peatlands](#)

Designated 17/03/2005 for internationally important habitats (Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels, Blanket upland bog, Acid peat-stained lakes and ponds, upland bogs - Depressions on peat substrates, Wet heathland with cross-leaved heath) and dwarf shrub upland heath) and species (Otter (*Lutra lutra*))

Site of Special Scientific Interest (SSSI) – [Loch Orasay](#)

Designated 22/12/1983 for Oligotrophic loch, Broad-leaved, mixed and yew woodland and aggregations of breeding birds (Greylag goose (*Anser anser*))



79.4 Topography and Land Use – Potential Diffuse Pollution Sources

The predominant land use is rough grazing for sheep and cattle, either on the hills to the South of the loch or on croft land to the North. There is some cultivated land on the North side of the loch amongst the crofts. There are a number of freshwater inputs into the loch, a couple of which drain the crofts on the north side of the loch and will also contain general road drainage. The main freshwater inflow is on the South side of the loch from the Lochs nan Ritheanan, Keose and Holovat. The area to the North of the loch is relatively densely populated and there are three significant discharges of sewage effluent to Loch Leurbost, though none of these are made directly into the designated area, they have the potential in combination for significant impacts on the water quality of the designated area.

An unsatisfactory discharge of sewage from Crossbost (West) septic Tank has led to 0.1 km of coastline being downgraded to class C according to the SEPA coastal classification scheme. This area is just outside the designated shellfish water to the West but the discharge is likely to impact on the shellfish water. A review of the consent to discharge has been carried out and a modified consent will shortly be issued.

SEPA has two diffuse source pollution pressures assigned for this Shellfish Waters, for livestock farming and sewage disposal. Bacterial Source tracking may be required to verify the source(s) of this diffuse pollution.

79.5 Point Source Discharge

There are no point source discharges into the designated area. Two Scottish Water septic tanks, servicing the settlement of Crossbost, have discharges either side of the designated area and service a combined PE of 179. An unsatisfactory discharge of sewage from Crossbost (East) septic Tank has led to 0.1 km of coastline being downgraded to class C according to the SEPA coastal classification scheme. This area is just outside the designated shellfish water to the West but the discharge is likely to impact on the shellfish water. A review of the consent to discharge has been carried out and a modified consent will shortly be issued. Two more Scottish Water septic tanks discharge to Loch Leurbost up loch of the designated area.

Three marine cage fish farms are located in close proximity to this shellfish water, though not in it. The sites are each consented to use a variety of sea-lice treatments.

| Type | Name | Consent No. | Treatment | NGR | PE | Additional Information |
|----------------------|------------------------------------|---------------|-------------|--------------|------------------------|---|
| Scottish Water Asset | Leurbost (West) SW Asset No 2869 | CAR/L/1001870 | Septic tank | NB 3687 2525 | 380 | Although outside the designated area, these discharges have the potential to affect water quality within it. Improved treatment is planned. |
| | Leurbost (East) SW asset No 2807 | CAR/L/1001879 | Septic tank | NB 3822 2455 | 250 | |
| | Crossbost (East) SW Asset No. 2770 | Unconsented | Septic tank | NB 402 243 | 80 | - |
| | Crossbost (West) SW Asset No. 2771 | CAR/L/1002871 | Septic tank | NB 391 245 | 99 | - |
| Category | Name | Consent No. | NGR | Biomass (t) | Additional Information | |
| Fish Farm | Crossbost | CAR/L/1002370 | NB 388 244 | 550 | - | |
| | North Shore | CAR/L/1004085 | NB 396 231 | 2250 | - | |
| | Arbahir | CAR/L/1004190 | NB 408 242 | 625 | - | |

79.6 Compliance Monitoring Regime

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

79.7 Compliance History

| UKS7992379 - Outer Loch Leurbost | | | | |
|----------------------------------|--|------------|-----------|---|
| | 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 | Pass |
| 2004 | Pass | Pass | Pass | Fail |
| 2005 | Pass | Pass | Pass | Fail |
| 2006 | Pass | Pass | Pass | Fail |
| 2007 | Pass | Pass | Pass | Pass |
| 2008 | Pass | No Data | No Data | No Data |
| 2009 | Pass | Pass | Pass | Pass |
| 2010 | Pass | Pass | Pass | Pass |

Of the six samples analysed for Faecal Coliforms in 2003 and 2004, two gave results above the Guideline standard. Only one of four samples in 2005 gave results which complied with the Guideline standard. The waters failed to comply with the guideline standard for faecal coliforms in 2006 but there were no results available for 2008. The waters passed guideline standards for faecal coliforms in 2009 and 2010.

79.8 Future Monitoring

The monitoring regime (79.6 Compliance Monitoring Regime) will continue but is reviewed annually.

79.9 Improvement Actions

The discharges of sewage effluent from both the Leurbost septic tanks and Crossbost will be collected and pumped over to Loch Erisort under Scottish Water's Quality and Standards III programme of investment.

WFD Objectives

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

| 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 | Pass by 2015 | Low | Pass by 2021 | Low | Pass by 2027 | Low |

79.10 Summary of Actions

| Action | Deadline |
|---|-----------------|
| Q&SIII investment and improvements for Leurbost septic tanks and Crossbost septic tanks. Discharge to be pumped over to Loch Erisort. | Done |