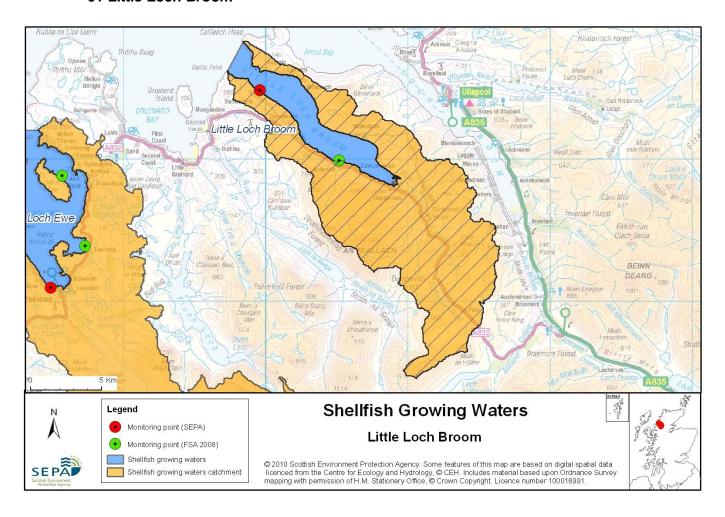
### **61 Little Loch Broom**



Name	Little Loch Broom		
Report Reference Number	61		
WFD Code	UKS7992361		
Local Information	An area inshore of a line drawn between NG9842098236 and NG9729696181 (Stattic Point) and extending inshore to MHWS.		
Designated Area (km²)	24.27		
Year of Designation	2002		
Sampling Points	Little Loch Broom at Badluarach Jetty (Biota) - NG 99604 94820		
Commencement of Monitoring	2003		

#### 61.1 Commercial Shellfish Interests

Little Loch Broom is also designated by the Food Standards Agency (FSA) as a Shellfish Harvesting Area, for the production of Common mussels (*Mytilus edulis*).

Little Loch Broom (Common Mussels) 2011 = A - 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 yet to carry out a sanitary survey for Little Loch Broom.

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

### **61.2 Bathymetric Information**

Little Loch Broom is situated on the north west coast, west of Ullapool. It has a northwest aspect and is protected from the south west winds but exposed to the north westerly winds.

The loch has a total length of 12.7km, which is the same length as the growing area. The catchment area is 167km2 and has a maximum water depth of 110m. The loch has two sills which divide the loch into two water areas or basins. The first sill is located near the entrance of the Loch at Corran Sgoraig and the second sill is located about 3-4km from the entrance. Maximum water depths in each basin are 77m and 110m respectively.

As a whole the loch takes 7 days to flush but each basin has its own local flushing characteristics, with some deep waters exchanging more slowly than this. Fresh/tidal flow ratio indicates a salinity reduction of 0.2 ppt, indicating a low freshwater input to the loch. There are no morphological pressures on the waters.

#### **61.3 Conservation Designations**

Part of Little Loch Broom is also designated as a Shellfish Harvesting Area by FSA.

Along the coast to the west is Loch Ewe which is designated as a Shellfish Water (<u>UKS7992369</u>) and also designated as a Shellfish Harvesting Area by FSA.

Site of Special Scientific Interest (SSSI) – <u>Dundonnell Woods</u> Designated 16/05/1985 for Upland mixed ash woodland

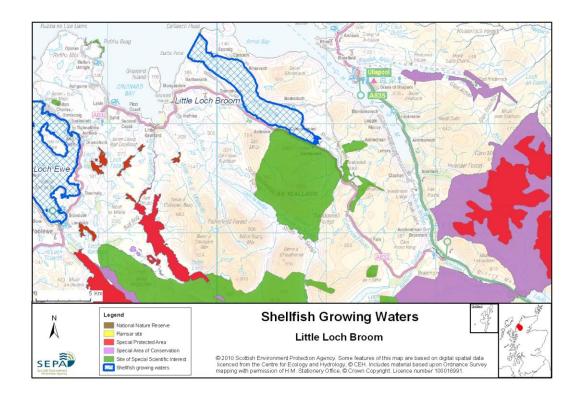
Site of Special Scientific Interest (SSSI) – <u>Creag Chorcurach</u>
Designated 256/06/1985 for Structural and metamorphic geology (moine)

#### Site of Special Scientific Interest (SSSI) – An Teallach

Designated 03/05/1984 for Quaternary geology and geomorphology of Scotland, Upland assemblage (mosaic), Vascular plant assemblage

### Site of Special Scientific Interest (SSSI) – Cailleach Head

Designated 20/04/1988 for Structural and metamorphic geology (Torridonian)



## 61.4 Topography and Land Use – Potential Diffuse Pollution Sources

The designated area covers the entire sea loch, approximately 15km long by 2km wide. The land around the loch is mainly of heather moorland, blanket bog, rough, rocky ground, with improved pasture along the Dundonnell River valley. The A 832 road runs along the western shore of the Loch, linking the settlements of Dundonnell, Camusnagaul, Badcaul and Badluarach. The isolated settlement of Scoraig lies on the northern point of the Loch. The principal source of diffuse pollution to the designated area is considered to be from sheep farming associated with these settlements.

There are two main freshwater inputs to the designated area; the Dundonnell River is classified as of excellent quality by SEPA, while the Allt Airdeasaidh is considered to be of at least good quality although this river is not monitored.

#### **61.5 Point Source Discharge**

There are no discharges from public sewage systems, or from industrial operations, to the designated area. Point source discharges to the designated area are limited to discharges from private sewage treatment systems.

There are three fish farms within the designated area with a combined consented biomass of 2062 tonnes.

Туре	Name	Treatment	Consent No.	NGR	PE	Additional Information
Scottish Water Asset	Badcaul Village Septic Tank, Badcaul	Septic Tank	WPC/N/0055466*	NH 02350 92150	-	-
Category	Naı	me	Consent No.	NGR	Biomass (t)	Additional Information
Category	Nai Ardessie		Consent No.  CAR/L/1003012	<b>NGR</b> NH 0473 9022		
Category Fish Farm		e Site A		_	(t)	

<sup>\*</sup> This site does not have a CAR authorisation at present.

# **61.6 Compliance Monitoring Regime**

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

Year	Monitoring Regime
	Twice yearly for metals in water
2005 -	Annually for metals and organohalogens in mussels
2005 -	Quarterly for faecal coliforms in mussels
	Quarterly for salinity, DO, pH and temperature

# **61.7 Compliance History**

	UKS7992361 - Little Loch Broom				
	Compliance histo	Compliance history for faecal coliforms			
Year	Overall Result	Imperative	Guideline	Guideline	
2003	Pass	Pass	Pass	Fail	
2004	Pass	Pass	Pass	Pass	
2005	Pass	Pass	Pass	Pass	
2006	Pass	Pass	Pass	Pass	
2007	Pass	Pass	Pass	Fail	
2008	Pass	Pass	Pass	Pass	
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. All four samples conformed to Guideline standard in 2005. The waters passed the guideline standard again in 2006 but failed in 2007 with only one sample out of four passing. Guideline faecal coliforms passed in 2008, 2009 and 2010.

### **61.8 Future Monitoring**

The monitoring regime (61.6 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.

# **61.9 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 and Guideline Shellfish Growing Water Standards, with high 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	High	Pass by 2021	High	Pass by 2027	High

### **61.10 Summary of Actions**

Action	Deadline
No improvement actions required	N/A