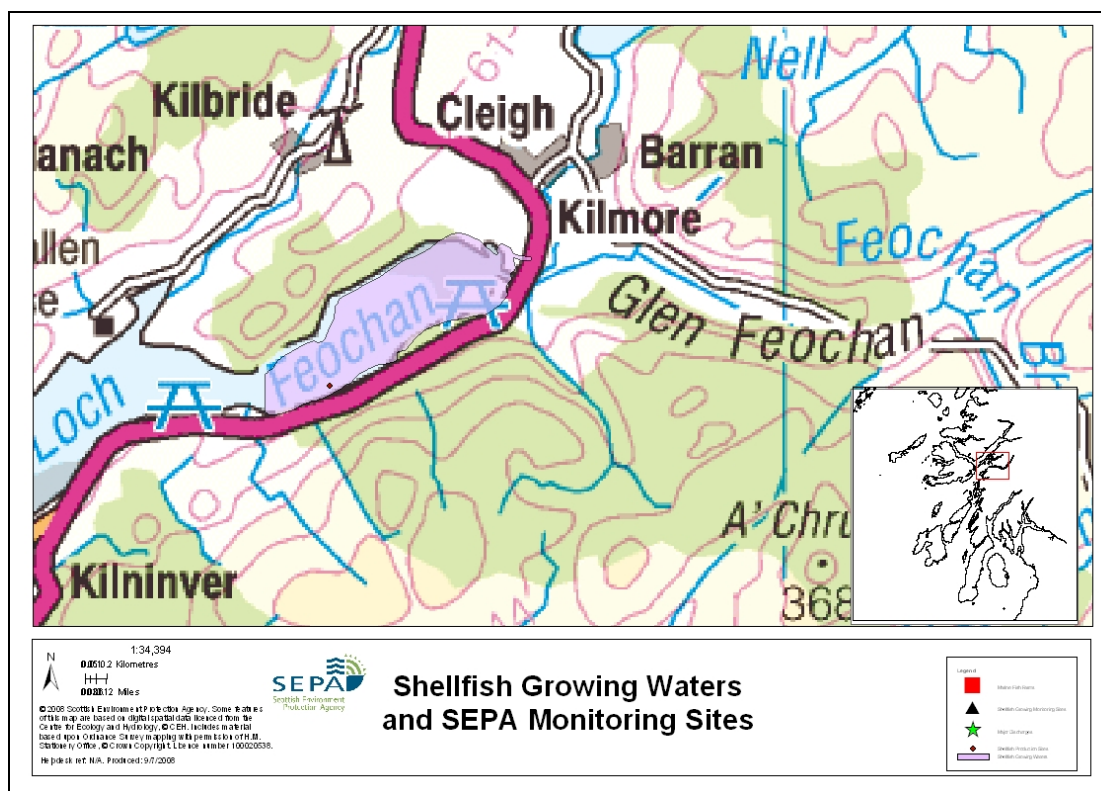


71 Loch Feochan



Name	Loch Feochan	
Report Reference No.	71	
WFD Code	UKS7992371	
Location Information	The shellfish designated water of Loch Feochan is an area inshore of a line drawn between NM 852 236 and NM 852 234 and extending to MLWS.	
Designated Area (Km²)	1.6	
Year of Designation	2002	
Sampling Points	Loch Feochan	NM 87036 24233
Commencement of Monitoring	2003	

71.1 Commercial Shellfish Interests

There growing waters are not classified for commercial production but growing takes place at one farm.

71.2 Bathymetric Information

Loch Feochan has a total length of 6.7km and the designated water is some 2 km long. Two sills split the loch into 2 water areas or basins. One located close to the entrance of the loch and the other east of Ardentallen Bay. Maximum water depth in the loch is 29m. As a whole, the loch takes 1 day to flush but each basin will have its own local flushing characteristics. The catchment area is large - 146km².and the

fresh/tidal flow ratio is 1.5, indicative of a high fresh water influence on this small loch. There are no morphological pressures on the waters.

71.3 Conservation Designations

There are no conservation areas within the catchment or within 2 km of the designated water.

71.4 Topography And Land Use – Potential Diffuse Pollution Sources

The catchment that drains to Loch Feochan is approximately 130 square kilometres, 27 km² of which is in managed forestry. The remainder of the land is mainly rough pasture and hill ground rising to 500 metres. The 13 known farms are involved in beef and sheep production and any pollution from agricultural activities is most likely connected with dirty yards or failure to contain run-off from middens. The biological impact on receiving waters of slurry run-off from fields grazed by cattle and sheep is unknown. Six of the farms have groundwater authorisations for the disposal of spent sheep dip.

The major freshwater inputs to the designated area are the Rivers Nell and Feochan, both of which are classified as being of excellent quality by SEPA. The Moleigh Burn is a minor freshwater input to the designated area. Several other minor streams flow into the designated area and, although these are not monitored by SEPA, are considered to be of at least good quality.

Kilmore with a population of 120 is the only significant community in the area, a further 250 people live in isolated houses or small-scale developments. There is a small marina at Ardoran with a number of developments providing self-catering accommodation.

71.5 Point Source Discharges

Scottish Water is consented to discharge effluent from the Kilmore STW into the River Nell. This discharge has no impact on the macro-invertebrate community of the River, which is classified as having excellent ecological status.

There are no consented discharges from private septic tanks within the catchment area, although there may be unconsented private sewage discharges, either raw sewage or from septic tanks.

Moleigh Landfill Site accepts up to 24,950 t/annum of household, commercial and industrial waste including fish waste and sewage sludge. There are currently two untreated leachate streams that discharge to the Moleigh Burn, within the catchment of Loch Feochan. Improvement action has been agreed between SEPA and the operators of the landfill.

Type	Name	CAR authorisation	Treatment	NGR	PE	Additional Information
Scottish Water Asset	Kilmore	CAR/L/1000611	treated	NM882258		Core Population 120
	Name	CAR authorisation	Treatment	NGR		Additional Information
Industrial	Moleigh Landfill	CAR/L/10000823	trade effluent	NM8690826440		

There are no fish farms within at least 2km of the designated area.

71.6 Compliance Monitoring Regime

Year	Monitoring Regime
2005-	<ul style="list-style-type: none"> Quarterly for Sal, DO, pH, temperature, visible oil Every third year for metals and organohalogens in mussels, next collection scheduled for 2008 Quarterly for faecal coliforms in mussels

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

71.7 Compliance History

Year	Compliance History for Waters and Biota, Excluding Faecal Coliforms Data			Compliance History for Faecal Coliforms
	Overall Result	Imperative	Guideline	Guideline
2003	Pass	Pass	Fail	Fail
2004	Pass	Pass	Fail	Pass
2005	Pass	Pass	Fail	Pass
2006	Pass	Pass	Pass	Fail
2007	Pass	Pass	Pass	Fail

Of the six samples analysed for Faecal Coliforms in 2003 and 2004, two gave results above the Guideline standard. In 2005, only one out of four samples gave results above the Guideline standard. The waters failed to comply with the guideline standard in 2006 and 2007.

In years 2003 to 2005 the salinity of the water has dropped below the minimum Guideline standard resulting in breaches of the standard. There are no anthropogenic inputs to the area that could account for a drop in salinity to such levels.

71.8 Future Monitoring Recommendations

The monitoring regime as described in section 6 will be followed. In the event of any chemistry parameter failing to meet any EQS, the site will be revisited and re-sampled for the failed parameter.

71.9 Improvement Actions

Improvements to the quality of the Moleigh Burn have been completed. Two leachate treatment systems consisting of aerated ponds and engineered reedbed were introduced in 2006/2007. A new composting facility that is now under construction, will minimise the putrescible input to the landfill. SEPA is currently in discussion with the operators of Moleigh Landfill Site and it is likely that in the future the site will only accept inert substances or material suitable.

71.10 Summary of Actions

Action	Deadline
Leachate treatment systems at the Moleigh Landfill Site, improvements to Moleigh Burn water quality	Completed 2006/2007