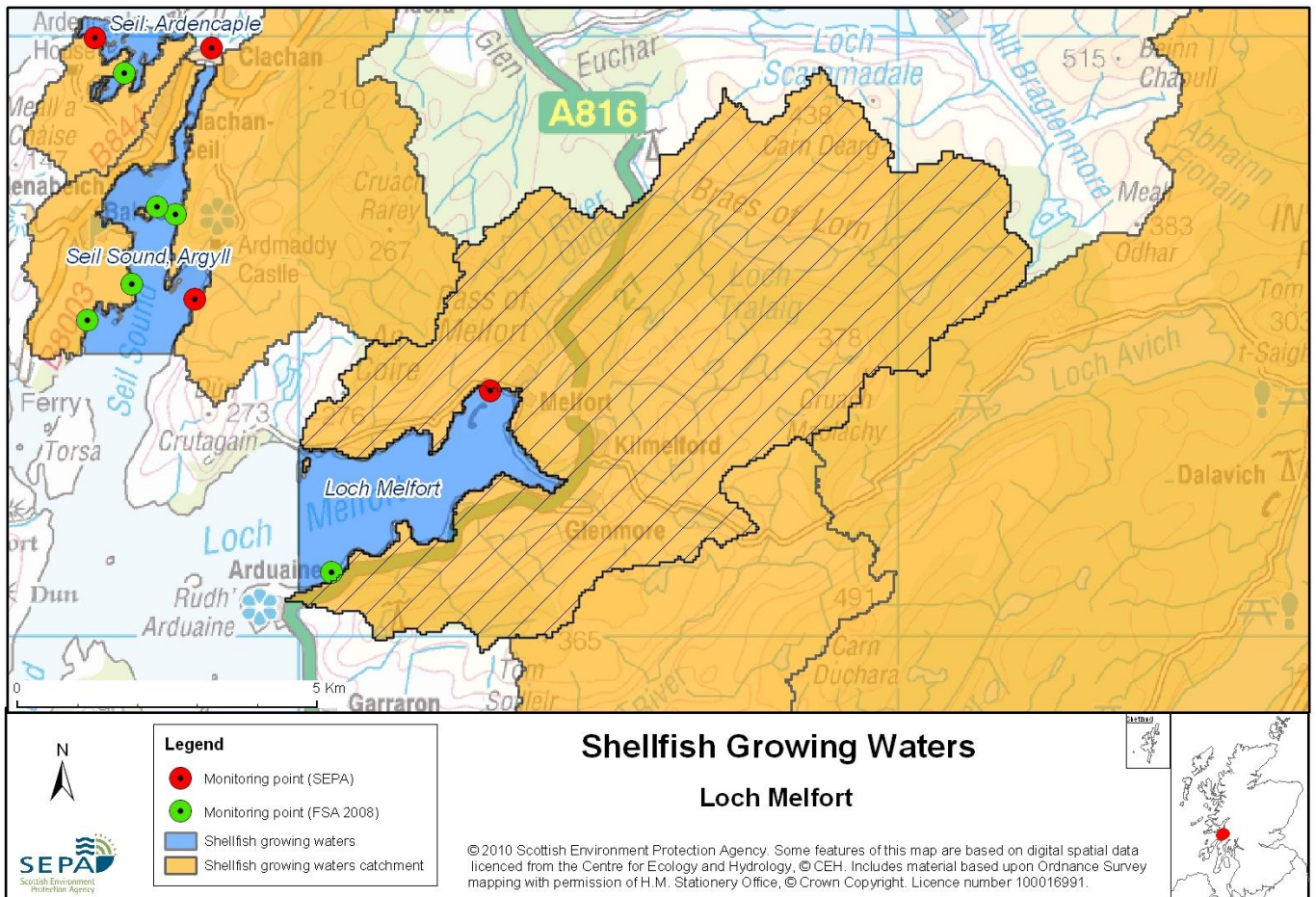


81 Loch Melfort



Name	Loch Melfort
Report Reference Number	81
WFD Code	UKS7992381
Local Information	An area inshore of a line drawn between NM8000013168 and NM8000010772, and extending to MHWS.
Designated Area (km ²)	6.36
Year of Designation	2002
Sampling Points	Loch Melfort Mussel Site - NM 83204 14093
Commencement of Monitoring	2003

81.1 Commercial Shellfish Interests

Loch Melfort is also designated as a Shellfish Harvesting Area by the Food Standards Agency (FSA). The Shellfish Harvesting Area extends further out than the Shellfish Growing Water designation.

FSA classify Loch Melfort for the production of Common mussels (*Mytilus edulis*)

Loch Melfort (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.

FSA have not carried out a sanitary survey for Loch Melfort.

For more information on Food Standards Agency Classification please visit:

<http://www.food.gov.uk/scotland/safety/hygienscot/shellmonitorscot/shellclassesscot/>

81.2 Bathymetric Information

Loch Melfort has a total length of 6km and a maximum water depth of 73m. The Loch faces south west but is sheltered from prevailing winds by the islands of Luing and Shuna near its mouth. A sill lies outside the entrance of the Loch and flushing time for Loch Melfort is relatively slow at 9 days. The catchment area is 73 km² and the fresh/tidal flow ratio, which reflects the degree of possible influence of fresh water on the overall salinity, is moderately high (0.3) for the small size of the Loch. There are no morphological pressures on the waters.

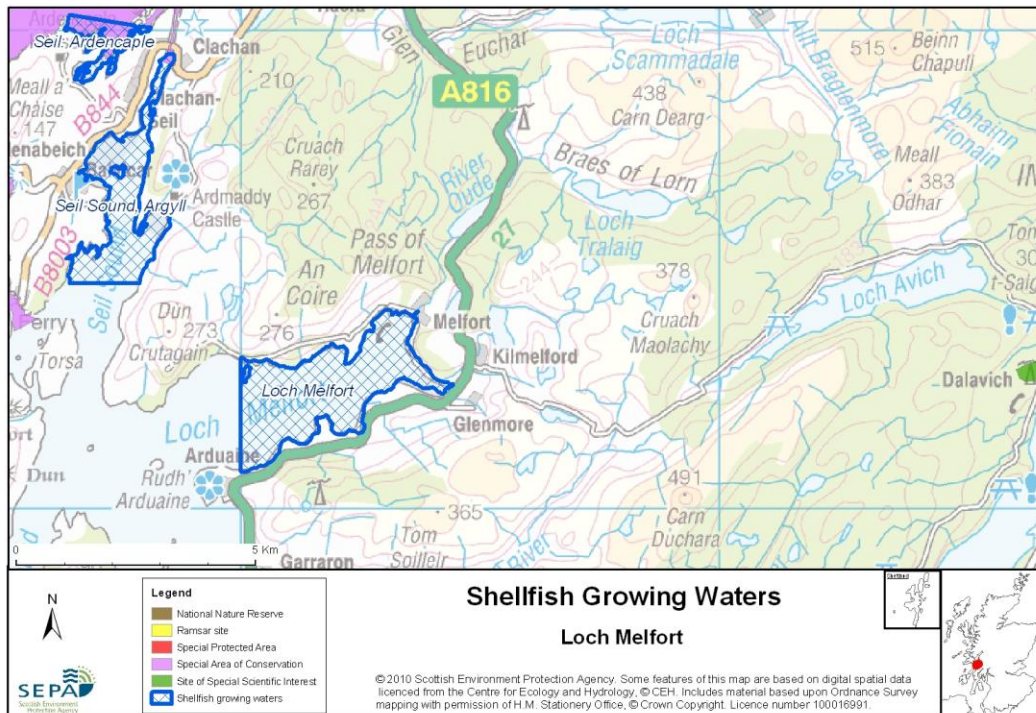
81.3 Conservation Designations

Loch Melfort is also designated as a FSA Shellfish Harvesting Area.

Seil Sound, Argyll designated Shellfish Water ([UKS7992331](#)) is northwest of Loch Melfort, part of which is also designated as a Shellfish Harvesting Area by the FSA

Loch Craignish Shellfish Designated Shellfish Water ([UKS7992365](#)) is south of Loch Melfort a small part of which is designated as a Shellfish Harvesting Area by FSA.

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



81.4 Topography and Land Use – Potential Diffuse Pollution Sources

The catchment that drains to Loch Melfort is approximately 57 square kilometres, 18kms of which is in managed forestry. The land around the shores of Loch Melfort is of semi-natural woodland, improved pasture and semi-natural grassland. The remainder of the land is rough, comprising rocky outcrops, lochans and heather moor. The two known farms within the area run very extensive beef and sheep production systems.

There are several minor freshwater inputs to the designated area, the largest being the River Oude. None of these inputs are monitored by SEPA, although all are considered to be of at least good quality.

Kilmelford with a population of 152 is the only significant community in the area, a further 120 live in isolated houses or small-scale developments. Loch Melfort is a popular tourist destination and Melfort, at the head of the loch, has a number of developments providing self-catering accommodation, including one that has accommodation for up to 200. There is also a yachting marina and boatyard within the designated shellfish water.

81.5 Point Source Discharge

Scottish Water is consented to discharge effluent from its septic tank serving the community of Kilmelford into the mouth of Abhainn na Cille, where it flows into the designated area. There are a number of consented discharges from private septic tanks within the catchment area. There may be unconsented private discharges of either raw sewage or septic tank effluent into the designated area or its catchment.

There is one industrial operation consented to discharge to the designated area.

Type	Name	Treatment	Consent No.	NGR	PE	Additional Information
Scottish Water Asset	Glebe Housing Development	-	CAR/L/10000217	NM 84304 12567	-	Population Settlement Area: Core 152 / Non-Core: 120
Industrial	Kames Hatchery	Trade effluent	CAR/L/1000827	NM 820116	-	-
Category	Name		Consent No.	NGR	Biomass (t)	Additional Information
Fish Farm	Kames Bay		CD 8433	NM 8230 1180	250	-
	Eilean Coltair		CAR/L/1000197	NM 8020 1270	364.9	-

There are two fish farms within the designated area, with a combined consented biomass of 614.9 tonnes.

81.6 Compliance Monitoring Regime

The following monitoring regime was implemented in July 2005.

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 2011 Quarterly for faecal coliforms in mussels

81.7 Compliance History

UKS7992381 - Loch Melfort				
	Compliance history for Waters and Biota, excluding faecal coliforms data			Compliance history for faecal coliforms
Year	Overall Result	Imperative	Guideline	Guideline
2003	Pass	Pass	Fail ¹	Fail
2004	Pass	Pass	Pass	Fail
2005	Pass	Pass	Fail ²	Fail
2006	Pass	Pass	Pass	Fail
2007	Pass	Pass	Pass	Pass
2008	Pass	No Data	No Data	Pass
2009	Pass	Pass	Pass	Pass
2010	Pass	Pass	Pass	Pass

The waters consistently failed to comply with the Guideline standard for faecal coliforms from 2003 to 2006. However the waters passed from 2007 to 2010.

¹Single samples of water in both 2003 and 2004 gave results below the Guideline minimum standard for salinity. There are no anthropogenic inputs to the area that could account for a drop in salinity to such levels. The results are almost certainly due to a combination of low tide and high run off from rainwater affecting the sampling site at the time of sampling, and are not representative of the salinity of the designated area as a whole. This being a natural phenomenon, no measures will be taken, in accordance with Article 7(3) of the Directive.

²There were two breaches in the Guideline standard for salinity again in 2005. The results of 7.26 ‰ and 9.32 ‰ fell below the 12-38 ‰ minimum standard. The cause of this is likely to again be a combination of low tide and high run off from rainwater.

81.8 Future Monitoring

The monitoring regime (81.6 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.

81.9 Improvement Actions

There have been improvements made to sewage treatment at Kilmelford under Scottish Water's investment and infrastructure programme.

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

81.10 Summary of Actions

Action	Deadline
Improvements to sewage treatment at Kilmelford.	done