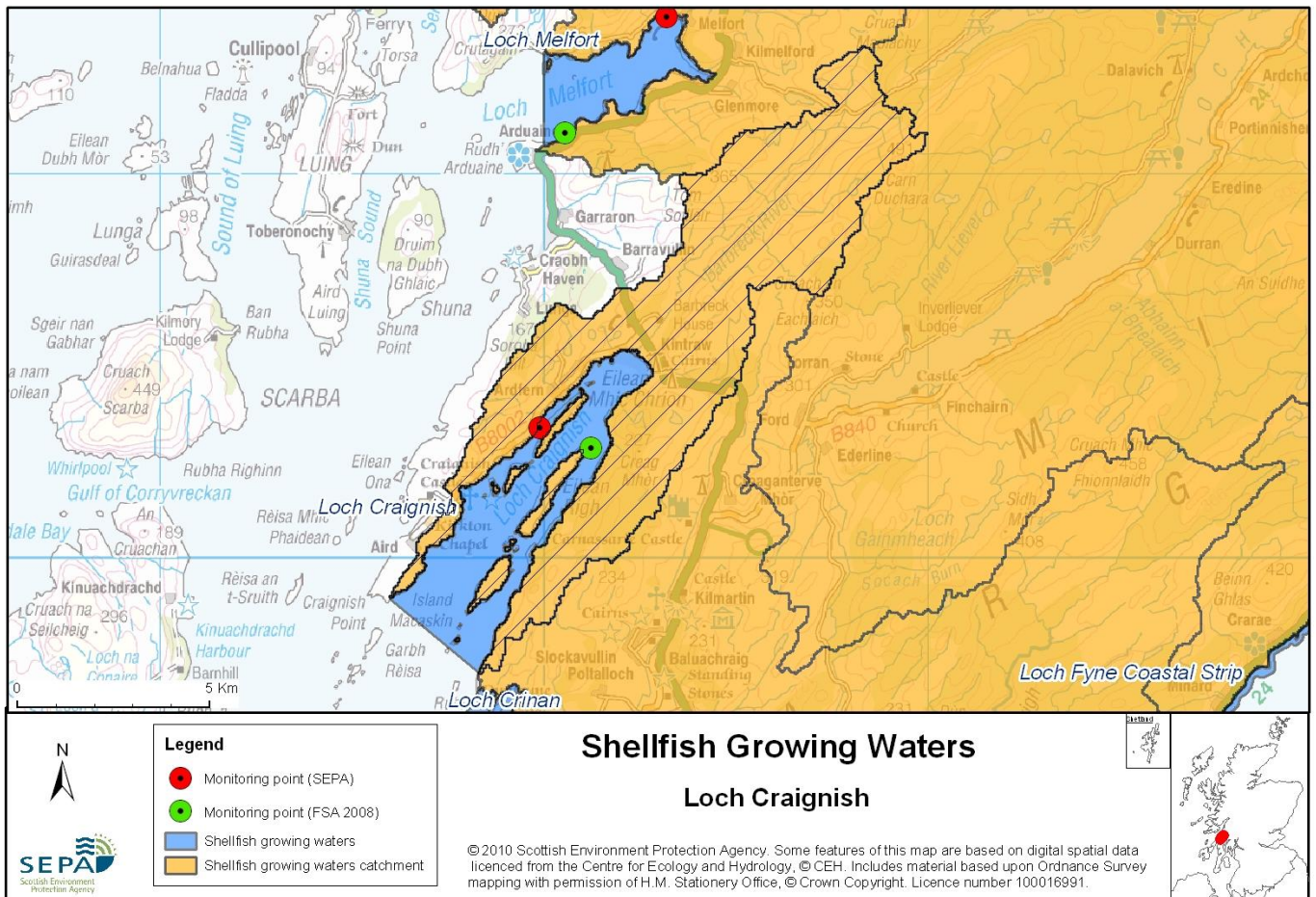


65 Loch Craignish



Name	Loch Craignish
Report Reference Number	65
WFD Code	UKS7992365
Local Information	An area north east of a line drawn between NR7598498919 (Rubh' an Lionaidh) and NR7827497022, and extending to MHWS.
Designated Area (km ²)	15.37
Year of Designation	2002
Sampling Points	Loch Craignish - NM 79900 03400
Commencement of Monitoring	2003

65.1 Commercial Shellfish Interests

For more information on Food Standards Agency Classification please visit:

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

65.2 Bathymetric Information

Loch Craignish is situated on the west coast and lies east of Ardfern. The loch has a south west aspect. Its waters are open to the Sound of Jura and are exposed to the prevailing south west winds.

The loch has a total length of 8.8km, which is the same length as the growing area. The catchment area is 73km² and has a maximum water depth of 59m. The loch has five sills dividing the area into 4 water areas or basins. The first two sills are located near the entrance to the loch at the first small Island Macaskin, the third sill is between the two islands Eilean Dubh and Eilean Mhic Chrion. The fourth and fifth sills are at the start and end of the small island Eilean Righ. Maximum water depths for the basins range from 14-36m.

As a whole the loch takes 5 days to flush and 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 within the waters.

65.3 Conservation Designations

South of Loch Craignish is Loch Crinan designated Shellfish Water ([UKS79923116](#)).

To the North is Loch Melfort designated Shellfish Water ([UKS7992381](#)), which is also designated as a Shellfish Harvesting Area by the Food Standards Agency (FSA).

Special Area of Conservation (SAC) – [Firth of Lorn](#)

Designated for 17/03/2005 for internationally important Marine Inshore sublittoral rock (Reefs)

This is also designated a **Water Dependent SAC**

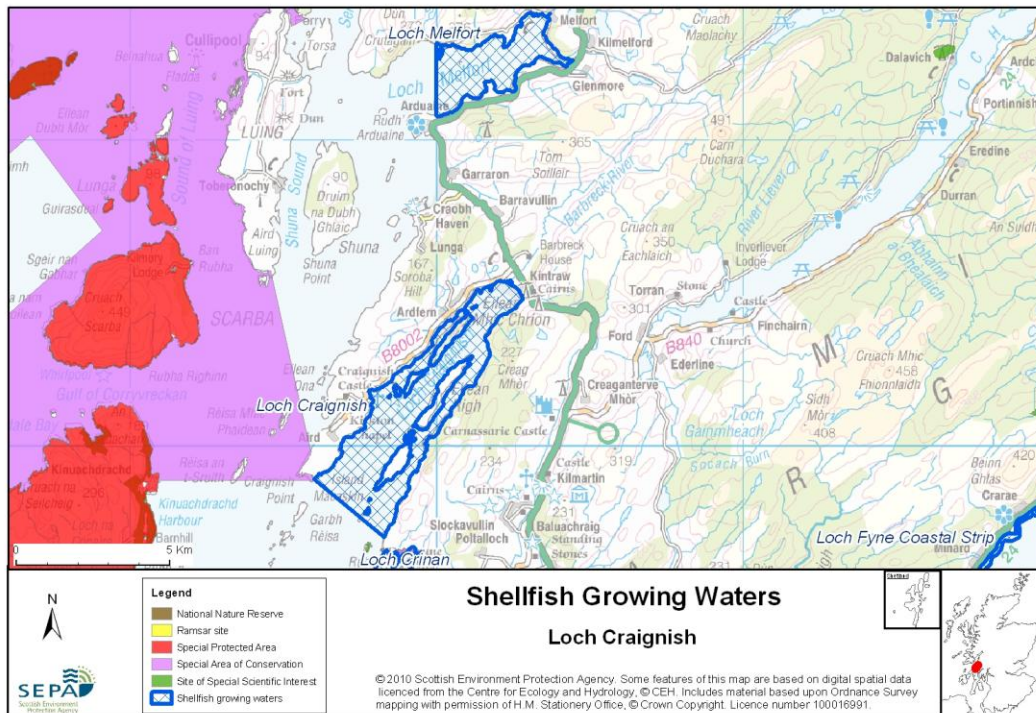
Special Area of Conservation (SAC) – [Moine Mhor](#)

Designated 17/03/2005 for internationally important species (Otter (*Lutra lutra*), Marsh fritillary butterfly (*Euphydryas* (*Eurodryas*, *Hypodryas aurinia*)) and habitat (Active raised bog, Atlantic salt meadows, Degraded raised bog, Intertidal mudflats and sandflats, Western acidic oak woodland)

This is also a **Water Dependent SAC** and a **Groundwater Dependent SAC**

Sites of Special Scientific Interest (SSSI) – [Moine Mhor](#)

Designated 14/12/1990 for assemblages of breeding birds, Marsh fritillary (*Euphydryas aurinia*) and habitat (Estuarine raised bog, Saltmarsh, Upland oak woodland)



65.4 Topography and Land Use – Potential Diffuse Pollution Sources

The catchment that drains to Loch Craignish is approximately 45 square kilometres, the majority draining to one watercourse, the Barbreck River. The Barbreck River is classified as being of excellent quality by SEPA. There are several minor freshwater inputs that are considered to be of at least good quality, although these are not monitored by SEPA.

The land around the designated area is of improved pasture, semi-natural woodland, coniferous plantation or is used for extensive agriculture.

Ardfern with a population of 190 is the only significant community in the catchment area. It is a popular destination for tourists during the summer, and there is a busy yachting marina in the bay. There is scattered housing along the north shore of Craignish peninsula, but the Barbreck valley is sparsely populated.

The most likely reason for past guideline faecal coliform failures (see 65.7 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.

65.5 Point Source Discharge

Scottish Water is consented to discharge effluent from its septic tank serving the community of Ardferrn into Loch Craignish.

There are a number of consented septic tank discharges to the designated water or to watercourses within the catchment. These waters also receive unconsented

discharges from septic tanks or of raw sewage. SEPA has received a number of complaints about the condition of one of these watercourses.

There are four marine cage fish farms within the designated area with a combined consented biomass of 3635 tonnes.

Type	Name	Treatment	Consent No.	NGR	PE	Additional Information
Scottish Water Assets	Ardfern Outfall	Septic Tank	CAR/L/1000268	NM 807 043	190	-
Category	Name	Consent No.	NGR	Biomass (t)	Additional Information	
Marine Cage Fish Farm	Ardifuir	CAR/L/1021927	NR 7840 9760	1575	-	
	Port na Moine, Site 1, South	CAR/L/1000812-VN3	NM 7997 0059	385	-	
	Port na Moine, Site 2, North	CAR/L/1020918	NM 8053 0147	1375	-	
	Port a' Bheacainn	CAR/L/1000813-VN1	NM 8120 0220	300	-	

There are no other industrial discharges within the shellfish water catchment area.

65.6 Compliance Monitoring Regime

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

Year	Monitoring Regime
2005 -	<ul style="list-style-type: none"> • Quarterly for Sal, DO, pH, temperature, visible oil • Twice yearly for metals in water • Annually for metals and organohalogens in mussels • Quarterly for faecal coliforms in mussels

65.7 Compliance History

UKS7992365 - Loch Craignish				
	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	Pass
2008	Pass	Pass	Pass	Fail
2009	Pass	Pass	Pass	Pass
2010	Pass	Pass	Pass	Pass

The waters have consistently failed to comply with the Guideline Standard for faecal coliforms from 2003 to 2006. The waters passed in 2007, 2009 and 2010 but failed in 2008.

* Very limited data available for 2007 but all results complied with the Imperative and Guideline standards.

65.8 Future Monitoring

The monitoring regime (65.6 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.

65.9 Improvement Actions

There are aspirations of improvements to sewage treatment at Ardfern septic tank but there is nothing currently planned in Scottish Water's Quality and Standards II or III 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 Shellfish Growing Water Standards, with high confidence. The Guideline Shellfish Growing Water Standards are also predicted to pass by 2015 but with low confidence, due to past failures of the guideline faecal coliform standards.

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

65.10 Summary of Actions

Action	Deadline
No improvement actions currently planned	N/A