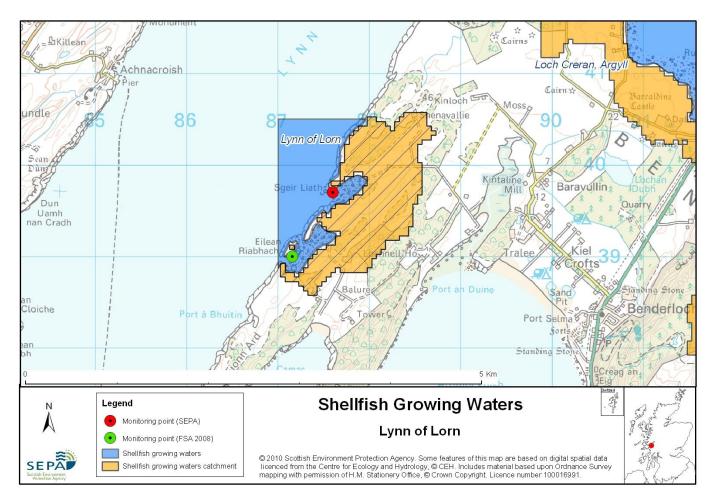
91 Lynn of Lorn



Name	Lynn of Lorn		
Report Reference Number	91		
WFD Code	UKS7992391		
Local Information	An area bounded by lines drawn between NM8700040500 and NM8795740500 and between NM8700040500 and NM8700038870, and extending to MHWS.		
Designated Area (km ²)	1.02		
Year of Designation	2002		
Sampling Points	Lynn of Lorn Mussel Site - NM 87600 39700		
Commencement of Monitoring	2003		

91.1 Commercial Shellfish Interests

The Food Standards Agency (FSA) Shellfish Harvesting Area Lynn of Lorn: Port a Bhuiltin was de-designated in 2008.

A small section of the designated Shellfish Water is also designated by the FSA as a Shellfish Harvesting Area (Lynn of Lorn: Sgeir Liath) for the production of Pacific oysters (*Crassostrea gigas*).

Lynn of Lorn: Sgeir Liath (Pacific oysters) 2011 = A - April to December 2012 = A - January to March

Less than 2km north of Lynn of Lorn Shellfish Water is Lynn of Lorn: Eilean Dubh FSA Shellfish Harvesting site, which is classified for the production of Common mussels (*Mytilus edulis*).

Lynn of Lorn: Eilean Dubh (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 carried out a sanitary survey for the Lynn of Lorn.

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

91.2 Bathymetric Information

The growing area extends 2km north from Eilean Riabhach and would be exposed to prevailing south-westerly winds. However, due to the relatively flat nature of the neighbouring island of Lismore, the area could also be open to winds originating from the west and northwest. The maximum depth of the water is approximately 23m.

There are no morphological pressures on the waters.

91.3 Conservation Designations

Loch Creran designated Shellfish Water (<u>UKS7992332</u>) is northeast of Lynn of Lorn. There a re three FSA Shellfish Harvesting Areas in Loch Creran.

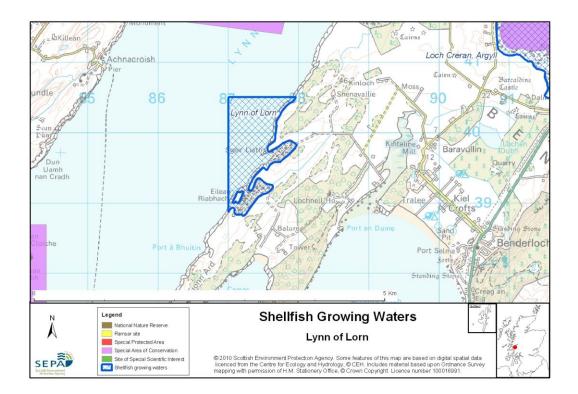
Special Area of Conservation (SAC) – <u>Eileanan agus Sgeiran Lios mor</u> Designated 17/03/2005 for internationally important species - Common seal (*Phoca vitulina*) This is also a Water Dependent SAC

Special Area of Conservation (SAC) – <u>Loch Creran</u> Designated 17/03/2005 for Marine inshore sublittoral rock (reefs) This is also a Water Dependent SAC

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Sites of Special Scientific Interest (SSSI) – <u>Lynn of Lorn Small Islands</u> Designated 30/12/1986

Sites of Special Scientific Interest (SSSI) – <u>South Shian and Balure</u> Designated 28/02/1990 for Quaternary geology and geomorphology of Scotland



91.4 Topography and Land Use – Potential Diffuse Pollution Sources

The Lynn of Lorn designated water receives one minor freshwater inflow from a small catchment area of approximately 2 square kilometres containing three houses. The land around the designated area is of blanket bog, heather moorland, semi-natural woodland and improved pasture.

The most likely reason for past guideline faecal coliform failures (see 91.7 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.

91.5 Point Source Discharge

There are no consented discharges to the designated area from public sewage systems, private septic tanks or industrial operations.

Scottish Water is consented to discharge raw sewage from the settlement of Achnacroish into the Lynn of Lorn within 2km of the designated area.

There is one fish farm just over 2km west of the designated site with a biomass of 999 tonnes.

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91.6 Compliance Monitoring Regime

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

Year	Monitoring Regime
	 Quarterly for Sal, DO, pH, temperature, visible oil
2005 -	 Every three years for metals and organohalogens in mussels,
2003 -	next scheduled collection 2011
	 Quarterly for faecal coliforms in mussels

91.7 Compliance History

	UKS7992391 - Lynn of Lorn						
	Compliance histo fa	Compliance history for faecal coliforms					
Year	Overall Result	Imperative	Guideline	Guideline			
2003	Pass	Pass	Pass	Fail			
2004	Pass	Pass	Fail	Fail			
2005	Pass	Pass	Pass	Fail			
2006	Pass	Pass	Pass	Fail			
2007	Pass	Pass	Pass	Fail			
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 standards for faecal coliforms from 2003 to 2008, but passed in 2009 and 2010.

A single sample in 2004 gave a result 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 result is 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 is 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

91.8 Future Monitoring

The monitoring regime (91.6 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.

91.9 Improvement Actions

SEPA to promote improvements to the quality of the present Scottish Water discharge at Achnacroish. This is outwith the designated area however and specific investigation into the catchment draining to the designated area is proposed to identify potential diffuse / point source inputs pollution inputs.

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 not predicted to pass until 2021 (second River Basin Management Plan Cycle). This is due to past failures of the Guideline faecal coliform standards. Target objectives may be revised after the first River Basin Management Plan Cycle.

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	Fail by 2015	Low	Pass by 2021	Low	Pass by 2027	Low

91.10 Summary of Actions

Action	Deadline
SEPA to promote improvements to the quality of the present Scottish Water discharge at Achnacroish. Investigation into the catchment draining to the designated area is proposed to identify potential diffuse / point source inputs pollution inputs.	N/A