## Loch a’ Chumhainn

### Local Information
An area inshore of a line drawn between NM3858855024 (Rubha an Aird) and NM4088857041 (Quinish Point), and extending to MHWS.

### Designated Area (km²)
4.81

### Year of Designation
2002

### Sampling Points
Loch a’ Chumhainn - NM 40200 54000

### Commencement of Monitoring
2003
64.1 Commercial Shellfish Interests

Loch a’ Chumhainn is also designated by the Food Standards Agency (FSA) as a Shellfish Harvesting area for the production of Pacific oysters (*Crassostrea gigas*), at two sites (Inner Deep Site and Outer)

Loch a’ Chumhainn: All sites (Pacific oysters)
- 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 Loch a’ Chumhainn

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

64.2 Bathymetric Information

Loch a’ Chumhainn has a north westerly aspect, so remains relatively sheltered from prevailing winds. It has a total length of 4.2km and maximum water depth of 14m.

There are no basins in this loch thus flushing time for the loch is rapid, taking 1 day. The catchment area is 57km2 and fresh/tidal flow ratio is 0.5, indicative of a moderately high influence of fresh water to the loch.

There are no morphological pressures on the waters.

64.3 Conservation Designations

To the east is Tobermory designated Shellfish Waters ([UKS792399](http://www.food.gov.uk/scotland/safetyhygienescot/shellmonitorscot/shellclassesscot/)) which lies within a larger FSA Shellfish Harvesting Area.

South is Isle of Ulva, Mull (Loch Tuath) designated Shellfish Waters ([UKS79923114](http://www.food.gov.uk/scotland/safetyhygienescot/shellmonitorscot/shellclassesscot/)). Parts of this are also designated by the DFSA as Shellfish Harvesting Areas.

**Special Area of Conservation (SAC)** – Mingarry Burn
Designated 17/03/2005 for internationally important species - Freshwater pearl mussel (*Margaritifera margaritifera*)
This is also a **Water Dependent SAC** and a **Groundwater Dependent SAC**

**Sites of Special Scientific Interest (SSSI)** – Calgary Dunes
Designated 30/06/1986 for supralittoral coastal sediment (Machair)

**Sites of Special Scientific Interest (SSSI)** – S’Airde Beinn
Designated 30/04/1986 for Mineralogy of Scotland, Igneous petrology (Tertiary Igneous)
64.4 Topography and Land Use – Potential Diffuse Pollution Sources

The Loch a Chumhainn site is a bay with a coastline of approximately 15kms. The catchment is long and narrow, rising to 300 metres at the head of the main watercourse, the Bellart that discharges into the bay. There are also several minor freshwater inputs to the designated area. Neither the Bellart, nor the minor freshwater inputs are monitored by SEPA but all inputs are considered to be of at least good quality.

The land around the designated area is mainly used for extensive sheep and cattle farming. There are also large areas of semi-natural woodland and coniferous plantation, with smaller areas of blanket bog and semi-natural grassland.

There are four known farms within the catchment, one with a groundwater authorisation for the disposal of spent sheep dip. The agriculture is extensive beef and sheep production. Dervaig with a population of 130 is the only significant community in the area and is a popular tourist destination during the summer months. The remainder of the catchment is sparsely populated and has an estimated population of less than 60.

64.5 Point Source Discharge

Scottish Water has one raw sewage outfall that serves the community of Dervaig. Prior to this area being designated as a shellfish growing water, plans were finalised with Scottish Water to build a septic tank to take this sewage.

There are a number of consented private septic tank discharges to the designated area, or within the catchment.
There are no industrial discharges to the bay or within the catchment, and there are no fish farms within at least 2km of the designated area.

<table>
<thead>
<tr>
<th>Type</th>
<th>Name</th>
<th>Treatment</th>
<th>Consent No.</th>
<th>NGR</th>
<th>PE</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scottish Water Asset</td>
<td>Dervaig</td>
<td>Raw</td>
<td>CAR/L/1000270</td>
<td>NM 428 518</td>
<td>60 - 131</td>
<td>Upgrading to Septic tank</td>
</tr>
</tbody>
</table>

### 64.6 Compliance Monitoring Regime

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Monitoring Regime</th>
</tr>
</thead>
</table>
| 2005 | • 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 |

### 64.7 Compliance History

<table>
<thead>
<tr>
<th>Year</th>
<th>Overall Result</th>
<th>Imperative</th>
<th>Guideline</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
<td>Fail</td>
</tr>
<tr>
<td>2004</td>
<td>Pass</td>
<td>Pass</td>
<td>Fail</td>
<td>Fail</td>
</tr>
<tr>
<td>2005</td>
<td>Pass</td>
<td>Pass</td>
<td>Fail¹²</td>
<td>Fail</td>
</tr>
<tr>
<td>2006</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
<td>Fail</td>
</tr>
<tr>
<td>2007</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>2008</td>
<td>Pass</td>
<td>No Data</td>
<td>No Data</td>
<td>Pass</td>
</tr>
<tr>
<td>2009</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>2010</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
</tbody>
</table>

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

1Failure relates to a single result in April 2005 for dissolved oxygen of 72.1% which failed to meet the Guideline standard of >80%. It did, however, comply with the Imperative standard of >70%.

2Failure relates to a single result for cadmium in 2005 of 10.73 mg/kg which breached the Guideline standard of 5.00 mg/kg. It did, however, comply with the Mandatory standard of 15 mg/kg.

64.8 Future Monitoring

The monitoring regime (85.6 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

64.9 Improvement Actions

Scottish Water is currently improving the works at Dervaig to provide additional treatment of the effluent prior to discharge. This was a late delivery of work identified under Scottish Water’s Quality and Standards II programme.

WFD Objectives


<table>
<thead>
<tr>
<th>Objective</th>
<th>First Cycle 2015</th>
<th>Confidence</th>
<th>Second Cycle 2021</th>
<th>Confidence</th>
<th>Third Cycle 2027</th>
<th>Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperative Shellfish Growing Waters Standard</td>
<td>Pass by 2015</td>
<td>High</td>
<td>Pass by 2021</td>
<td>High</td>
<td>Pass by 2027</td>
<td>High</td>
</tr>
</tbody>
</table>
### 64.10 Summary of Actions

<table>
<thead>
<tr>
<th>Action</th>
<th>Deadline</th>
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<tr>
<td>Additional treatment of effluent at Dervaig, late delivery under Q&amp;SI.</td>
<td>Ongoing</td>
</tr>
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