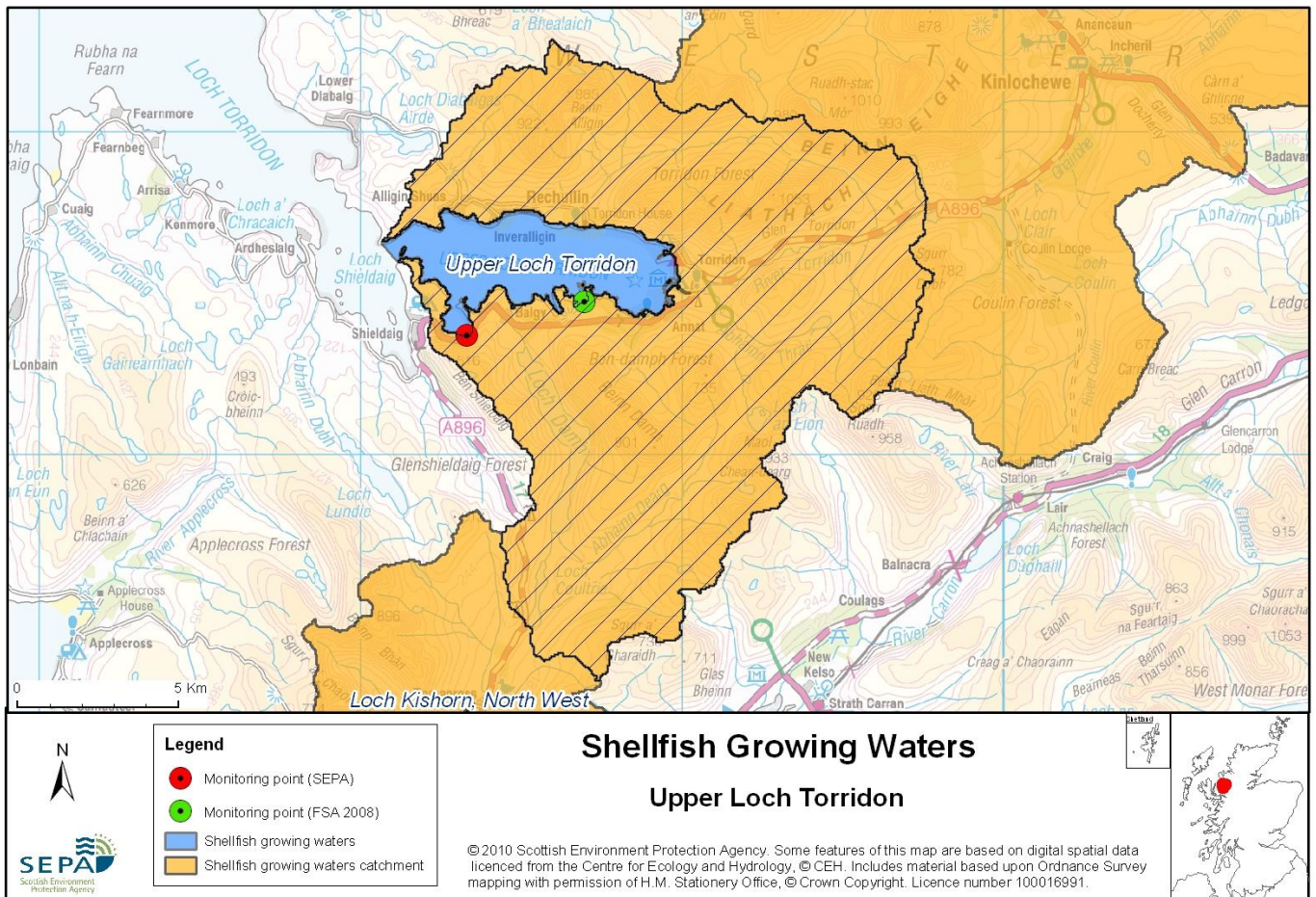


51 Upper Loch Torridon



Name	Upper Loch Torridon
Report Reference Number	51
WFD Code	UKS7992351
Local Information	An area east of a line drawn between NG8064456548 and NG8111355984 and extending to MHS.
Designated Area (km ²)	19.69
Year of Designation	2002
Sampling Points	Upper Loch Torridon Mussel Site (From April 2004) - NG 83317 53688
Commencement of Monitoring	2003

51.1 Commercial Shellfish Interests

Upper Loch Torridon is also designated as a Shellfish Harvesting Area by the Food Standards Agency (FSA) for the production of Common mussels (*Mytilus edulis*). The FSA call this area Inner loch Torridon and have three sites used for classification (Camas a Chlarsair, Ob Gorm Mor, Rubha na Feola).

Inner Loch Torridon: All sites (Common mussels)

2011 = A - April to June, December

B - July to November

2012 = A - January to March

Category A sites are of the highest standard and means that shellfish can go directly for human consumption however category B requires that shellfish must be depurated, heat-treated or re-laid prior to human consumption.

FSA have not yet carried out a sanitary survey for Loch Torridon.

For more information on Food Standards Agency Classification please visit:

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

51.2 Bathymetric Information

Loch Torridon is situated on the northwest coast near Sheildaig. The loch has a northwest aspect, with the inner part of the loch being more sheltered by a headland at Eilean a Chaoil. The loch has a total length of 22.2km with the shellfish growing area approximately 9km in length. The catchment area is 241km² and maximum water depth is 145m.

The loch has 3 sills which divide the loch into three water areas or basins. The first sill is located at the entrance of the loch, the second sill near Rubha Glas and the third at the narrows after Loch Sheildaig. Maximum water depths in each basin are 145m, 135m and 88m respectively.

As a whole, the loch takes 9 days to flush but each basin has its own local flushing characteristics, with some deep waters exchanging significantly more slowly than this. Fresh/tidal flow ratio indicates a salinity reduction of 0.1, indicating a low freshwater input to the loch. There are no morphological pressures on the waters.

51.3 Conservation Designations

National Nature Reserve (NNR) – [Beinn Eighe](#)

Designated 19/03/1974

Special Area of conservation (SAC) – [Beinn Bhan](#)

Designated 17/03/2005 for Acidic scree, Alpine and subalpine heaths, Dry upland heaths, Montane acid grasslands, Plants in crevices on acid rocks, Tall herb communities, Wet heathland with cross-leaved heath

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

Special Area of conservation (SAC) – [Rassal](#)

Designated 17/03/2005 for internationally important habitats - Alpine and subalpine calcareous grasslands, Base-rich fens, Hard-water springs depositing lime, inland rock (Limestone pavements), Mixed woodland on base-rich soils associated with rocky slopes, Mountain willow scrub, Plants in crevices on base-rich rocks.

Water Dependent SAC and a Groundwater Dependent SAC.

Special Area of conservation (SAC) – [Loch Maree Complex](#)

Designated 17/03/2005 for internationally important habitats - Acidic scree, Alder woodland on floodplains, Alpine and subalpine heaths, upland Blanket bog, Coniferous woodland, Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels, Depressions on peat substrates, Dwarf shrub heath (Upland), Montane acid grasslands

Water Dependent SAC and a Groundwater Dependent SAC.

Sites of Special Scientific Interest (SSSI) – [Beinn Bhan](#)

Designated 03/05/1984 for Tall herb ledge and Upland mosaic assemblage

Sites of Special Scientific Interest (SSSI) – [Shieldaig Woods](#)

Designated 16/05/1985 for species (beetles and flies), Bryophyte assemblage and habitats (Native pinewood, Upland birch woodland)

Sites of Special Scientific Interest (SSSI) – [Abhainn Alligin](#)

Designated 05/02/1988 for Upland Subalpine dry heath, Tall herb ledge and Upland mixed ash woodland

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

Designated 22/08/1985 for flies, inland rock (Limestone pavement), Structural and metamorphic geology (moine), Calcareous grassland (Upland), upland (mosaic) assemblage, Upland mixed ash woodland, Wood pasture and parkland

Sites of Special Scientific Interest (SSSI) – [Torridon Forest](#)

Designated 02/07/1986 for species (beetles, spiders, Sawflies, wasps and ants), Alpine moss heath and associated vegetation, alpine heath, Geomorphology (mass movement), Quaternary geology and geomorphology, Siliceous scree (includes boulder fields), Subalpine calcareous grassland, Subalpine dry heath

Sites of Special Scientific Interest (SSSI) – [Doire Damh](#)

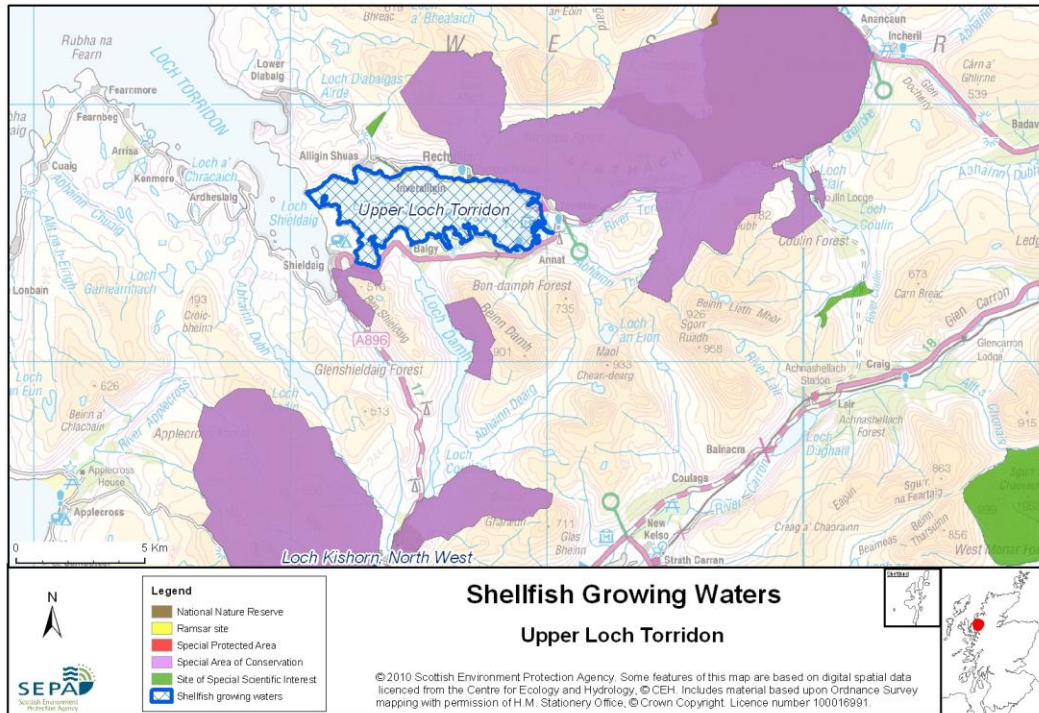
Designated 25/06/1985 for Upland oak woodland

Sites of Special Scientific Interest (SSSI) – [Beinn Eighe](#)

Designated 26/02/1985 for Bryophyte assemblage, Stratigraphy moine), (Structural and metamorphic geology (moine), species (moths), Native pinewood, upland assemblage (mosaic), Vascular plant assemblage

Sites of Special Scientific Interest (SSSI) – [Coulin Pinewood](#)

Designated 13/01/1984 for Dragonfly assemblage, Lichen assemblage, Native pinewood



51.4 Topography and Land Use – Potential Diffuse Pollution Sources

The land around the designated area is of heather moorland, rough, rocky ground with some semi-natural woodland and scrub. The A896 road runs along the southern side of the loch, linking the settlements of Shildaig, Balgy, Annat and Torridon. A minor road runs along the northern side of the loch to Inveralligin. Diffuse pollution is primarily from sheep and cattle farming associated with these settlements.

There are many freshwater inputs to the designated area, the largest being Abhainn Coire Mhic Nobuil, River Torridon and River Balgy. These are classified as being of at least good quality by SEPA. Minor inputs are also considered to be of at least good quality.

Two freshwater cage fish farms are located in Loch Damh, which feeds into the designated area via 1km of the River Balgy.

Pressures on this water body come from diffuse sources of pollution namely livestock farming and from sewage disposal. Bacterial source tracking may be required to verify the origin of the diffuse source pollution.

It may be beneficial to alter the monitoring location for Upper Loch Torridon. Both SEPA and FSA monitoring sites are situated in small enclosed bays that may give an unrepresentative sample. It may also be advisable to take samples from a variety of locations to ensure that results are representative of the designated area.

51.5 Point Source Discharge

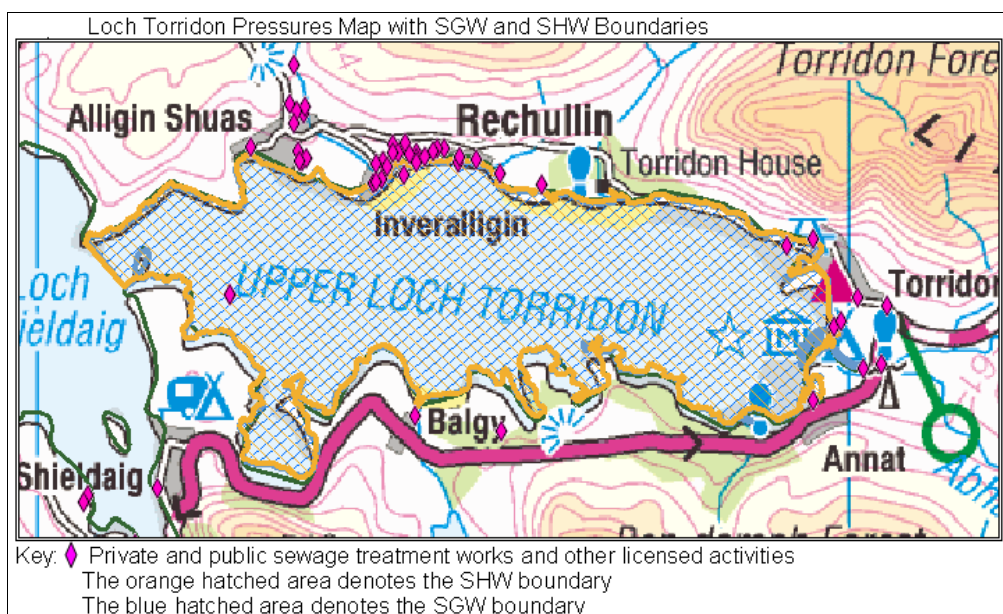
Scottish Water discharges from its public septic tank at Torridon within the designated area. There are several private septic tanks discharging into the designated area, as well as two septic tanks serving the shore bases of marine fish farm works.

Scottish Water also discharges from its public septic tank at Sheildaig (PE 390) within 2km of the designated water.

There is one fish farm within the designated area with a consented biomass of 2150 tonnes. There is another fish farm within 2km of the designated area, with a consented biomass of 1375 tonnes.

Type	Name	Treatment	Consent No.	NGR	PE	Additional Information
Scottish Water Asset	Torridon (Fasaig)	Septic Tank	CAR/L/1002062	NG 8925 5650	190	-
Industrial	Marine Harvest Macconnel (Shore Base)	Septic Tank	WPC/N/0059424*	NG 8375 5485	-	-
Other	Torridon Hotel	Septic Tank	WPC/N/0052284		170	-
	Considerable number (>30 predominantly north shore)	Private sewage treatment systems	-	-	-	-
Category	Name		Consent No.	NGR	Biomass (t)	Additional Information
Fish Farm	Torridon		CAR/L/1001815	NG 8240 5590	652	-

* This site does not have a CAR authorisation at present.



51.6 Compliance Monitoring Regime

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

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

51.7 Compliance History

UKS7992351 - Upper Loch Torridon				
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	Pass
2004	Pass	Pass	Fail	Pass
2005	Pass	Pass	Pass	Pass
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 shellfish waters failed to comply with the Guideline Standard for faecal coliforms in 2006 and 2008 but passed in 2009 and 2010.

In both 2003 and 2004, single water samples gave salinity readings below the minimum Guideline standard. There are no anthropogenic inputs to the area that could account for a drop in salinity to the low levels seen in two samples. 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 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

51.8 Future Monitoring

The monitoring regime (51.6 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.

51.9 Improvement Actions

There are currently no improvement actions identified for this designated Shellfish Water.

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 predicted to Pass by 2027 with low confidence.

It is predicted that this shellfish water will fail by 2015 and 2021, with low confidence. The shellfish passed in 2007 and 2009 which suggests it may pass before 2027, but as there were failures in 2008 this has low 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	Fail by 2015	Low	Fail by 2021	Low	Pass by 2027	Low

51.10 Summary of Actions

Action	Deadline
No improvement actions identified	N/A