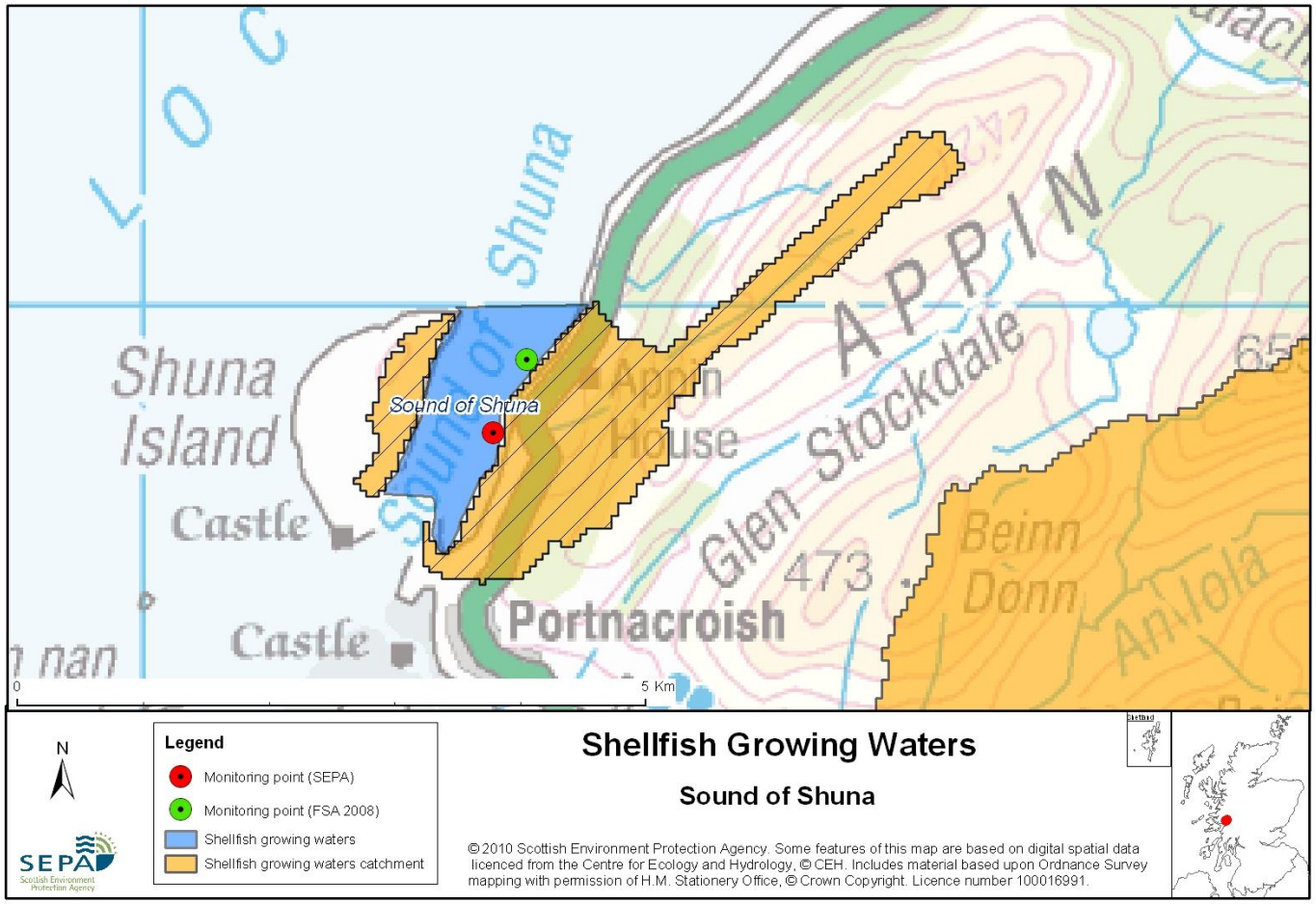
97 Sound of Shuna



Name	Sound of Shuna
Report Reference Number	97
WFD Code	UKS7992367
Local Information	An area bounded by lines between NM9249149980 and NM9353750001 and between NM9192348498 and NM9229148474, and extending to MHWS.
Designated Area (km²)	1.25
Year of Designation	2002
Sampling Points	Sound of Shuna Mussel Site - NM 92791 48985
Commencement of Monitoring	2003

97.1 Commercial Shellfish Interests

There is no classified shellfish water in this area but commercial shellfish are grown at one unit within the designated water.

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

97.2 Bathymetric Information

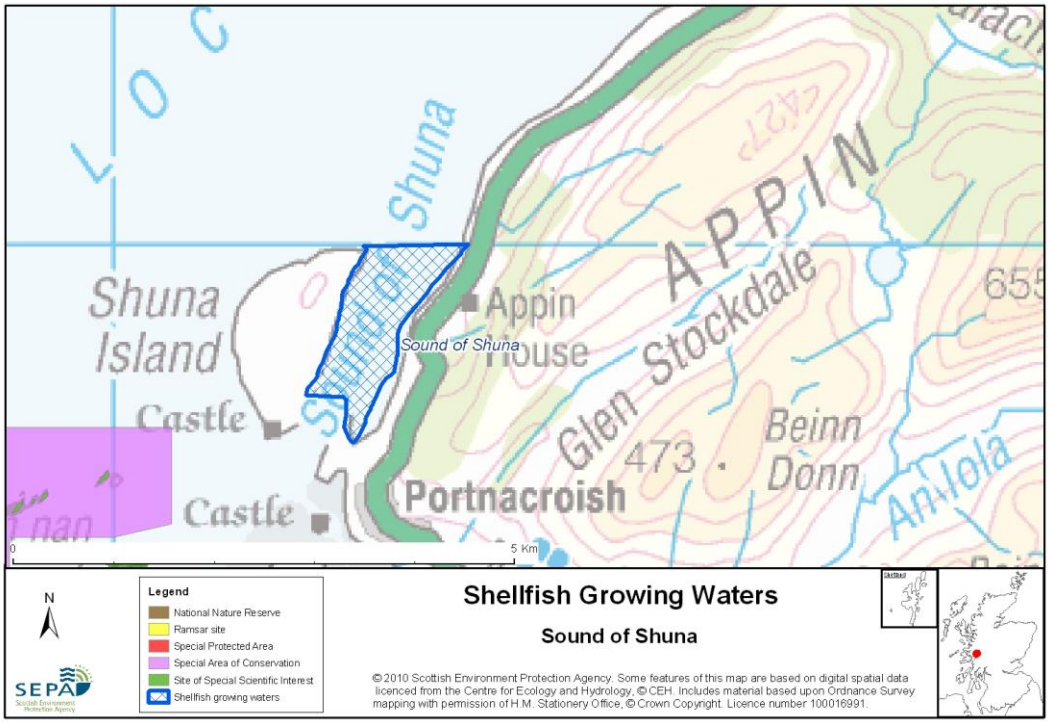
This area of water is a channel between Shuna Island and Appin. It is exposed to both north and south winds and has a length of 1.5km and, at its maximum, has a depth of approximately 32m. There are no morphological pressures on the waters.

97.3 Conservation Designations

Southwest of Sound of Shuna is Lismore designated Shellfish Water (UKS7992360). There is also a FSA designated Shellfish Harvesting Area to the south of Sound of Shuna.

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

Site of Special Scientific Interest (SSSI) – Lynn of Lorn Small Islands
Designated 30/12/1986



97.4 Topography and Land Use – Potential Diffuse Pollution Sources

The Sound of Shuna is a channel of water between the Island of Shuna and the mainland. The Sound receives freshwater from one minor input, which runs through mixed woodland and coniferous forestry for most of its length.

The land around the designated area is of improved pasture, semi-natural grassland, semi-natural woodland and coniferous plantation. The predominant land-use on Shuna is beef and sheep production, while on the mainland there is also some managed forestry on higher ground.

The area is sparsely populated, with some ribbon development and old croft houses along the A828 trunk road, which is also a popular coastal tourist route between Oban and Fort William.

The most likely cause of past failures to meet guideline faecal coliform standards is diffuse pollution from livestock farming and/or sewage disposal. If failures continue, bacterial source tracking studies may be required to verify the origin of the diffuse pollution.

97.5 Point Source Discharge

There are no consented discharges to the designated area from public sewage systems. There is a single consent for discharge of sewage effluent from a private septic tank into the designated area.

There is one marine cage fish farm within the designated water, with a consented biomass of 800 tonnes. There are no other industrial dischargers within the shellfish water catchment area.

Category	Name	Consent No.	NGR	Biomass (t)	Additional Information
Fish Farm	Sound of Shuna	CAR/L/10009032	NM 925 496	800	-

97.6 Compliance Monitoring Regime

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

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

97.7 Compliance History

UKS7992397 - Sound of Shuna				
	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	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	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. The waters passed 2007 to 2010.

A single sample in 2003 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

97.8 Future Monitoring

The monitoring regime (97.6 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.

97.9 Improvement Actions

There are plans to implement membrane filtration for the discharge from Balvicar/ Clachanseil septic tank under Scottish Water's programme of infrastructure and investment, Quality and Standards III.

There are no further improvement actions planned for this area.

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 guideline faecal coliform failures. 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	Pass by 2015	Low	Pass by 2021	Low	Pass by 2027	Low

97.10 Summary of Actions

Action	Deadline
Membrane filtration for Balvicar/Clachanseil septic tank	