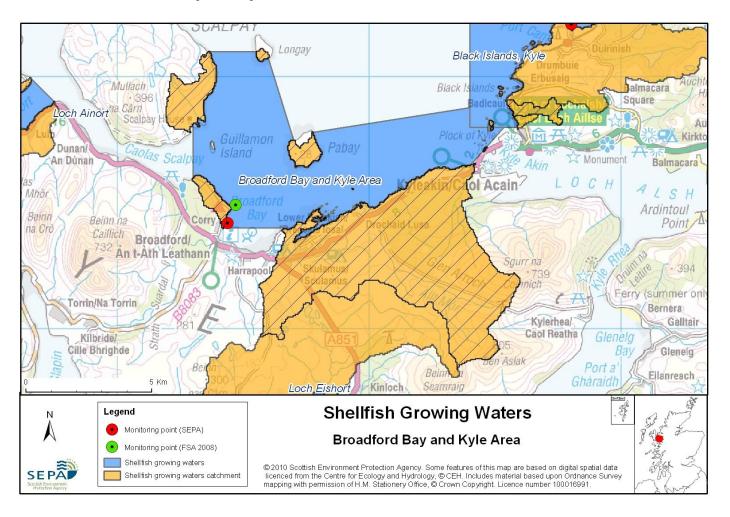
11 Broadford Bay and Kyle Area



Name	Broadford Bay and Kyle Area		
Report Reference Number	11		
WFD Code	UKS7992311		
Local Information	An area bounded by lines drawn between the point NG6300026011 and NG6300028113 (Scalpay) an between NG6368131000 and NG6549131000 (Longay) and between NG6598830734 and NG6699827506 (Pabay) and between NG67784277 (Pabay) and NG7545029008 (Badicaul) and between NG7567528376 and NG7406626548 and between NG6665724000 and NG6422624000 and extending MHWS.		
Designated Area (km²)	43.12		
Year of Designation	1998		
Sampling Points	Broadford Bay Mussel Site - NG 64400 24200		
Commencement of Monitoring	1998		

11.1 Commercial Shellfish Interests

The Broadford Bay and Kyle Area Shellfish Water Overlaps with the Black Islands, Kyle designated Shellfish Water. There is also a Food Standards Agency (FSA) Shellfish Harvesting Area at Broadford Bay out to Pabay.

Broadford Bay – Queen Scallops 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 has yet to carry out a sanitary survey in Broadford Bay

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

11.2 Bathymetric Information

Broadford Bay and Kyle forms an extensive shellfish growing area, open to the north and east with an area some 10 km by 4 km. The maximum depth reaches 30 m. There are no morphological pressures in the area.

11.3 Conservation Designations

Part of Broadford bay is also designated as a Shellfish Harvesting Area by the Food Standards Agency (FSA)

The Broadford Bay and Kyle Area designated Shellfish Water, overlaps slightly in the east with Black Islands, Kyle designated Shellfish Water (<u>UKS7992336</u>).

To the west of Broadford Bay is Loch Ainort designated Shellfish Water (UKS792362)

Special Protected Area (SPA) - Cuillins

Designated 20/12/2002 for internationally important breeding bird species (Golden eagle (*Aquila chrys*aetos))

This is also a Water Dependent SPA and a Groundwater Dependent SPA

Special Area of Conservation (SAC) – Kinloch and Kyleakin Hills

Designated 17/03/2005 for internationally important habitats (Alpine and subalpine heaths, Blanket bog, Dwarf shrub heath (Upland), Mixed woodland on base-rich soils associated with rocky slopes, Western acidic oak woodland, Wet heathland with cross-leaved heath) and internationally important species (Otter (*Lutra lutra*) This is also a **Water Dependent SAC** and a Groundwater **Dependent SAC**

Special Area of Conservation (SAC) – Strath

Designated 17/03/2005 for internationally important habitats (Alpine and subalpine calcareous grasslands, Base-rich fens, Calcium-rich nutrient-poor lakes, lochs and pools, Hard-water springs depositing lime Inland rock (limestone pavements), Mixed woodland on base-rich soils associated with rocky slopes, Plants in crevices on base-rich rocks, Wet heathland with cross-leaved heath)

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

Special Area of Conservation (SAC) - Mointeach nan Lochain Dubha

Designated 17/03/2005 for Acid peat-stained lakes and ponds, upland blanket bogs, Very wet mires often identified by an unstable 'quaking' surface, Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels, Depressions on peat substrates

This is also a Water Dependent SAC

Special Area of Conservation (SAC) – Lochs Duich, Long and Alsh Reefs

Designated 17/03/2005 for Inshore sublittoral marine rock – reefs. This is also a Water Dependent SAC

This is also a Water Dependent SAC

Special Area of Conservation (SAC) – Coille Mhor

Designated 17/03/2005 for Western acidic oak woodland

This is also a Water Dependent SAC

Site of Special Scientific interest (SSSI) – Strath

Designated 21/08/1986 for Base-rich loch, Mineralogy of Scotland, Igneous petrology (Tertiary Igneous), Upland assemblage (mosaic), Upland birch woodland, Vascular plant assemblage, Molluscs

Site of Special Scientific interest (SSSI) – Rubh an Eireannaich

Designated 12/03/1987 for Igneous petrology (Tertiary Igneous)

Site of Special Scientific interest (SSSI) – Mointeach nan Lochain Dubha

Designated 31/07/1996 for upland blanket bog, Oligotrophic loch

Site of Special Scientific interest (SSSI) - Ob Lusa - Ard Nis Coast

Designated 05/07/1984 for Stratigraphy (Hettangian, Sinemurian, Pliensbachian)

Site of Special Scientific interest (SSSI) – Loch Ashaig

Designated 02/04/1990 for Quaternary geology and geomorphology of Scotland

Site of Special Scientific interest (SSSI) -

Kinloch and Kyleakin Hills (Monadh Chaol Acainn is Cheann Loch)

Designated 27/04/2001 for Alpine heath, upland blanket bogs, Bryophyte assemblage, Lichen assemblage, Structural and metamorphic geology (Torridonian), Subalpine dry heath, Subalpine wet heath, Upland oak woodland, Otter (*Lutra lutra*).

Site of Special Scientific interest (SSSI) – <u>Avernish</u>

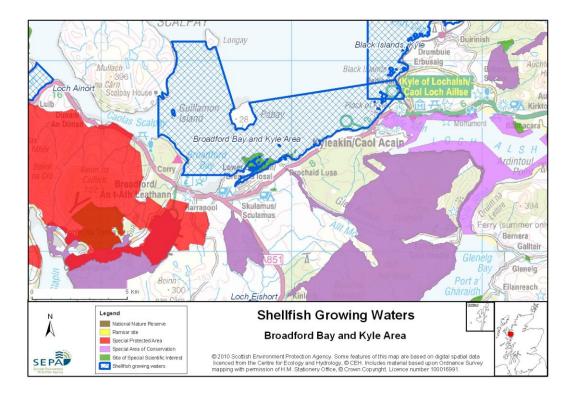
Designated 1/09/1984 for Structural and metamorphic geology (moine)

Site of Special Scientific interest (SSSI) – Ard Hill

Designated 07/12/1984 for Structural and metamorphic geology (moine)

Site of Special Scientific interest (SSSI) – Coille Mhor

Designated 18/09/2000 for Dragonfly assemblage, Oligotrophic loch, Upland oak woodland



11.4 Topography and Land Use - Potential Diffuse Pollution Sources

The two main land uses around the bay are improved pasture and coniferous forestry. There are some small sand and gravel pits on the shore at the east end of the bay. To the southwest, the settlements of Corry, Broadford, Harrapool and Breakish ring the inner bay, although the shellfish water designation does not extend into this body of water. The A850 road follows the southern shore of the bay. Inputs of freshwater are relatively minor, and assumed to be of good quality, although they are not monitored by SEPA.

11.5 Point Source Discharge

Туре	Name	Treatment	Authorisation Ref	NGR
	Broadford	Full biological	CAR/L/100616	NG 6486 2441
	Kyleakin	Primary Septic Tank CAR/L/1001861)		NG 754 265
Scottish Water	Kyle (Railway Pier East) ST	Primary Septic Tank	CAR/L/1002180	NG 763 271
Asset	Kyle (Ferry Pier) outlet	Primary Septic Tank	CAR/L/1001970	NG 761 271
	Kyle (Heathmount and Lochalsh Road) ST	Primary Septic Tank	CAR/L/1002005	NG 756 272
Other	The settlements of Corry, Broadford, Harrapool and Breakish are not served by public wastewater infrastructure and as such housing development in these areas predominately comprises private foul drainage systems either discharging to land via soakaway systems or direct to watercourses.			

One marine cage fish farm is located in Sound of Raasay and four in Loch Alsh, but these are not within the designated shellfish water.

11.6 Compliance Monitoring Regime

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

Year	Monitoring Regime		
	Quarterly for Sal, DO, pH, temperature, visible oil		
2005 -	Twice yearly for metals in water		
2005 -	Annually for metals and organohalogens in mussels		
	Quarterly for faecal coliforms in mussels		

11.7 Compliance History

	UKS7992311 - Broadford Bay and Kyle Area				
	Compliance histo	Compliance history for faecal coliforms			
Year	Overall Result	Imperative	Guideline	Guideline	
1998	Pass	Pass	Fail	Not monitored	
1999	Pass	Pass	Fail	Fail	
2000	Pass	Pass	Fail	Pass	
2001	Fail	Fail1	Fail	Pass	
2002	Pass	Pass	Pass	Pass	
2003	Pass	Pass	Pass	Pass	
2004	Pass	Pass	Pass	Pass	
2005	Pass	Pass	Pass	Pass	
2006	Pass	Pass	Pass	Pass	
2007	Pass	Pass	Pass	Pass	
2008	Pass	Pass	Pass	Pass	
2009	Pass	Pass	Pass	Pass	
2010	Pass	Pass	Pass	Pass	

 $^{^1}$ In 2001 there was a failure to observe the Imperative standard for copper. Two results were obtained for this parameter, 0.65 $\mu g \, I^{-1}$ and 7.87 $\mu g \, I^{-1}$ (the maximum allowable concentration in this instance being 5 $\mu g \, I^{-1}$). It is not thought that this single breach of the standard is significant, with copper results in previous and subsequent years all having been fully compliant.

The waters have complied with the Guideline standard for faecal coliforms since 2000.

11.8 Future Monitoring

The monitoring regime (11.6 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.

11.9 Improvement Actions

There is ongoing monitoring of the Scottish Water Assets highlighted in section 11.5 by SEPA to audit compliance against the requirements of the respective environmental authorisations. There are no planned improvement actions associated with any of the point source discharge pressures. SEPA will investigate any environmental complaint that may have an impact on water quality and will ensure appropriate corrective or remedial action is implemented.

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 and Guideline Shellfish Growing Water Standards, with high 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	Pass by 2015	High	Pass by 2021	High	Pass by 2027	High

11.10 Summary of Actions

Action	Deadline
Ongoing monitoring of area in accordance with SEPA's statutory obligations	ongoing