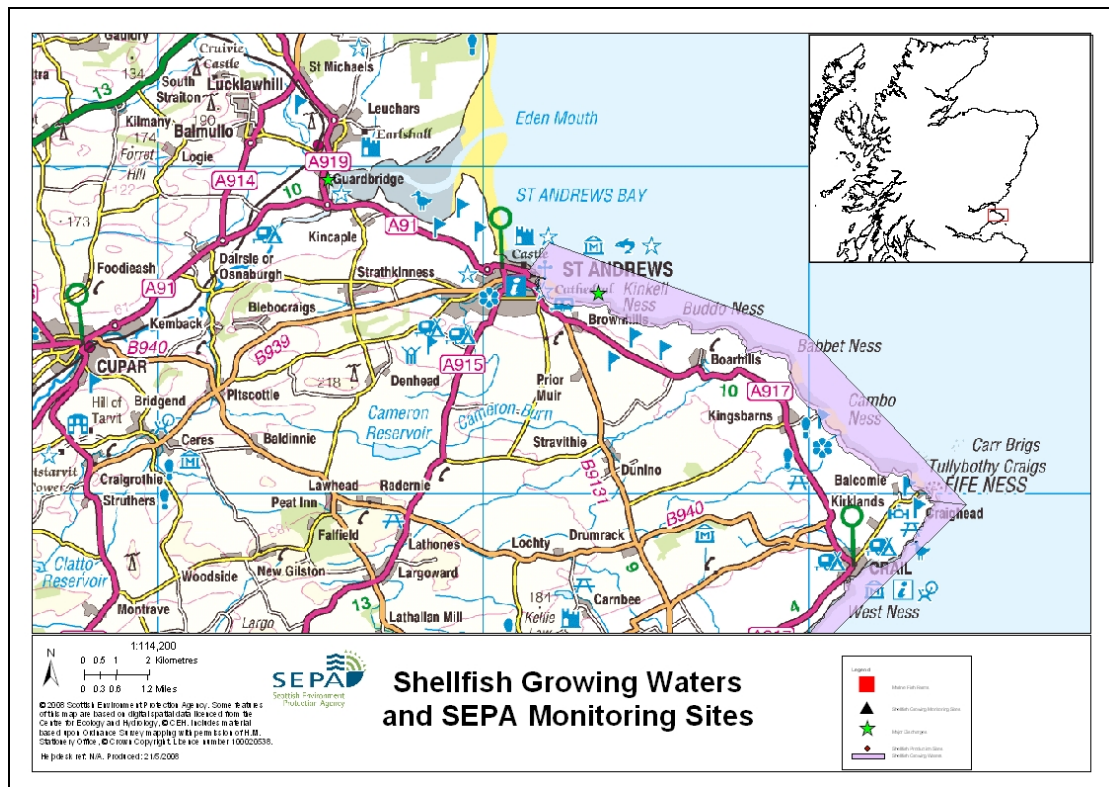


3 St Andrews to Fife Ness



Name	St Andrew's to Fife Ness	
Report reference no.	3	
WFD Code	UKS799233	
Location Information	Area bounded by coast and a line from St Andrews castle (NO 514 169) to NE to NO 520 177 then SE to NO 599 149 lying about 1 km off Babett Ness then to NO 648 097 then W for 1 km to Fife Ness (NO 638 098)	
Designated area (km²)	18.4	
Year of designation	1998	
Sampling points¹	St Andrews to Fife Ness	NO 52200 15900
Commencement of monitoring	1986	

¹ mussels

3.1 Commercial Shellfish Interests

No Crown Estates Commission (CEC) leases have been granted, although there are lobsters and razorfish in the area. The area is not classified for commercial shellfish production.

3.2 Bathymetric Information

The growing water has a NE facing aspect and a length of 15.2 km. The shore is gently shelving and has a maximum depth of 8 m. It is moderately exposed.

3.3 Conservation Designations

The shellfish waters from St Andrews to Fife Ness cover the EC designated bathing waters at Kingsbarns and St Andrews (East Sands). There is also a SSSI at St Andrews, Craig Hartle

http://gateway.snh.gov.uk/portal/page?_pageid=53,854555,53_854604&_dad=portal&_schema=PORTAL&PA_CODE=1467.

3.4 Topography and Land Use – Potential Diffuse Pollution Sources

The surrounding low-lying land is very fertile and almost exclusively used for arable farming.

Secondary pressures on the Shellfish waters include diffuse freshwater inputs. The Kenly Water and Cambo Burn drain considerable agricultural catchments and are impacted by diffuse agricultural pollution. Both are classed as of only fair quality for much of their length. The Kinness Burn is affected by both agricultural and urban runoff as it flows to the coast through St. Andrews.

There are a handful of small communities (including Boarhills and Kingsbarns), caravan parks and golf courses along the coast. St. Andrews is the biggest town in the area.

3.5 Point Source Discharges

Type	Name	Consent No.	Treatment	NGR	PE	Additional information
Scottish Water Asset	St Andrews STW at Kinkell Ness	CAR/L/100381 7	Tertiary treatment. Effluent "polishing" treatment.	NO 5324 1551	35000	LSO. Commissioned in 2000/2001
	Kingsbarns STW	CAR/L/100377 5	Secondary treatment with UV disinfection during bathing season	NO 6031 1274	500	Outfall extended to MLWST Mark in 2003.
	Harbour PS/CSO St. Andrews	CAR/L/100154 4	6mm Screening	NO 5175 1680		Outfall to MLWST Mark
	Bruce Embankment PS/CSO, St Andrews	CAR/L/100154 2	6mm Screening	NO 5070 1720		Outfall to MLWST Mark
Other	Coastguard Station at Fife Ness	-	Septic tank	NO 6390 0975	<250	Outfall to Low Water Mark
Industrial	Name	Consent No.	Treatment	NGR		Additional information

	Discharges from a small harbour at St Andrews	-	-	NO 5165 1660	
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- There are no marine cage fish farms within the designated shellfish water

3.6 Compliance Monitoring Regime

Year	Monitoring Regime
1997-2007	<ul style="list-style-type: none"> • Annually for metals and organohalogens in mussels • Quarterly for faecal coliforms in mussels

An assessment of data showed that there was no risk of failure in respect of the physico-chemical parameters, so the level of monitoring was reduced (in accordance with Article 7) in 1997 to annual monitoring of contaminants and quarterly monitoring of faecal coliforms in shellfish flesh.

3.7 Compliance History

Year	Compliance history for Waters and Biota, excluding faecal coliforms data			Compliance history for faecal coliforms
	Overall Result	Imperative	Guideline	Guideline
1993 -1998	Pass	Pass	Pass	Fail
1999	Pass	Pass	Pass	Fail
2000	Pass	Pass	Pass	Fail
2001	Pass	Pass	Pass	Fail
2002	Pass	Pass	Pass	Pass
2003	Pass	Pass	Pass	Pass
2004	Pass	Pass	Pass	Pass
2005	Pass	Pass	Pass	Pass
2006	Pass	Pass	Pass	Fail
2007	Pass	Pass	Pass	Fail

This growing water has remained consistently compliant with all physico-chemical parameter imperative and guideline values since 1993.

The waters have passed and failed the Guideline standard for faecal coliforms over the years. Unfortunately, the standard was not met in 2007. This may have been due to the wet weather experienced during the year which can lead to increased CSO operations as well as increased run-off from land.

3.8 Future Monitoring Recommendations

Annual sampling of mussels for organohalogens and metals will continue.

For failed chemistry parameters, the site will be revisited and re-sampled for the failed parameter. Samplers are asked to identify any evidence of visible harm to the shellfish population at the site.

St Andrews – Fife Ness ECSGW will be monitored quarterly for faecal coliforms in mussels.

3.9 Improvement Actions

The new treatment plant at Kinkell Ness with UV treatment and long sea outfall came online at the end of 2001. In 2003 the Kingsbarns STW outfall was extended to MLWST. The 2002 Review of Kingsbarns consent added a condition limiting faecal and total coliform content in the effluent during the bathing season (1st June to 15th Sept.) thus there is now disinfection during this period every year. A new wastewater treatment works which provides secondary treatment and ultra violet disinfection of Kingsbarns sewage was completed in the summer of 2005.

Scottish Water installed new replacement 6mm screens on the combined sewer overflows at St Andrews harbour and Bruce Embankment sewage pumping stations in January 2008.

Currently investigative work is being undertaken on the Kinness Burn in St Andrews to identify sources of faecal contamination.

3.10 Summary of Actions

Action	Deadline
New treatment plant and UV disinfection, Kinkell Ness 2001	Done
Review of consent, Kingsbarns STW and UV disinfection during bathing season. New STW works, 2005	Done
Installation of new replacement 6mm screens at St Andrews harbour and Buce Embankment sewage pumping stations in January 2008	Done
Investigative work into faecal contamination of Kinness Burn, St Andrews	Ongoing