


Bathing water profile:

Crail (Roome Bay)

<p>Bathing water: Crail (Roome Bay)</p>	
<p>EC bathing water ID number: UKS7616011</p>	
<p>Location of bathing water: UK/Scotland/Fife (Map1)</p>	
<p>Year of designation: 1999</p>	
<p>Bathing water description</p> <p>Crail (Roome Bay) bathing water is located in the small town of Crail in Fife (Map 1). The designated area is about 500 metres long and is a combination of sand and rock. There is a small pool at one end of the beach which is a haven for wildlife. It was designated as a bathing water in 1999.</p> <p>During high and low tides the approximate distance to the water's edge can vary from 0–200 metres. For local tide information see: http://easytide.ukho.gov.uk/EasyTide/index.aspx</p> <p>Our monitoring point for taking water quality samples is located in the centre of the designated area (Grid Ref NO 61926 07822) as shown on Map 1.</p>	
<p>Monitoring water quality</p> <p>Please visit our website¹ for details of the current EU water quality classification and recent results for this bathing water.</p> <p>During the bathing season (1 June to 15 September), designated bathing waters are monitored by SEPA for faecal indicators (bacteria) and classified according to the levels of these indicators in the water. The European standards used to classify bathing waters arise from recommendations made by the World</p>	

¹ <http://apps.sepa.org.uk/bathingwaters/>

Health Organisation and are linked to human health. More information on bathing water monitoring, health and classification can be found on our [website](#)².

Risks to water quality

In general, most natural waters will be affected to some extent during and following rainfall as pollutant loads may be increased due to run-off from agricultural or urban land in the catchment. In addition, at some locations waste water discharges from combined sewer overflows, which then drain into the bathing water and can reduce water quality.

Faecal pollutants can come from human sewage, farming activities and livestock (e.g. cattle, sheep), industrial processes, surface water urban drainage, domestic animals (e.g. dogs) and wildlife (e.g. birds) and can enter bathing waters via:

- direct discharges into the marine environment at, or in the vicinity of, the beach;
- the freshwater network draining into a bathing water, which can be prone to elevated bacterial levels as a result of diffuse pollution and/or point source inputs upstream.

The potential relevant pollution sources at, or near, this bathing water are highlighted on Map 1.

The principal risks and source of wet weather driven short term pollution at this bathing water arise from combined sewer overflows. These events are expected to last 1–2 days, depending on the duration of the rainfall, and may result in elevated bacteria levels compared to dry conditions.

Our regulatory and scientific assessment indicates that potential sources of short-term faecal indicator pollution at this bathing water can at times originate from human or animal sources.

Cyanobacteria (blue-green algae)

Marine waters are not at risk of overproduction of cyanobacteria.

Algae

Current information suggests that this bathing water is not at risk of excessive growth of macroalgae (seaweed) or phytoplankton.

Jellyfish

There is a possibility of increased numbers of jellyfish in the water during the summer months. This is a naturally occurring phenomenon. Although there are a few stinging species common to the UK, most are harmless. The Marine Conservation Society advises to 'look but don't touch'.

Daily water quality forecasts

Crail (Roome Bay) bathing water is not part of SEPA's signage network. Daily water quality predictions are not currently required for this bathing water.

² <http://apps.sepa.org.uk/bathingwaters/SamplingResults.aspx>

Map 1: Crail (Roome Bay) bathing water









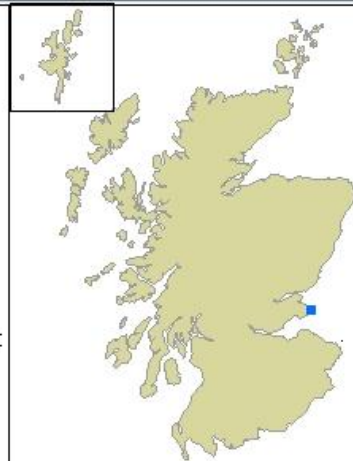
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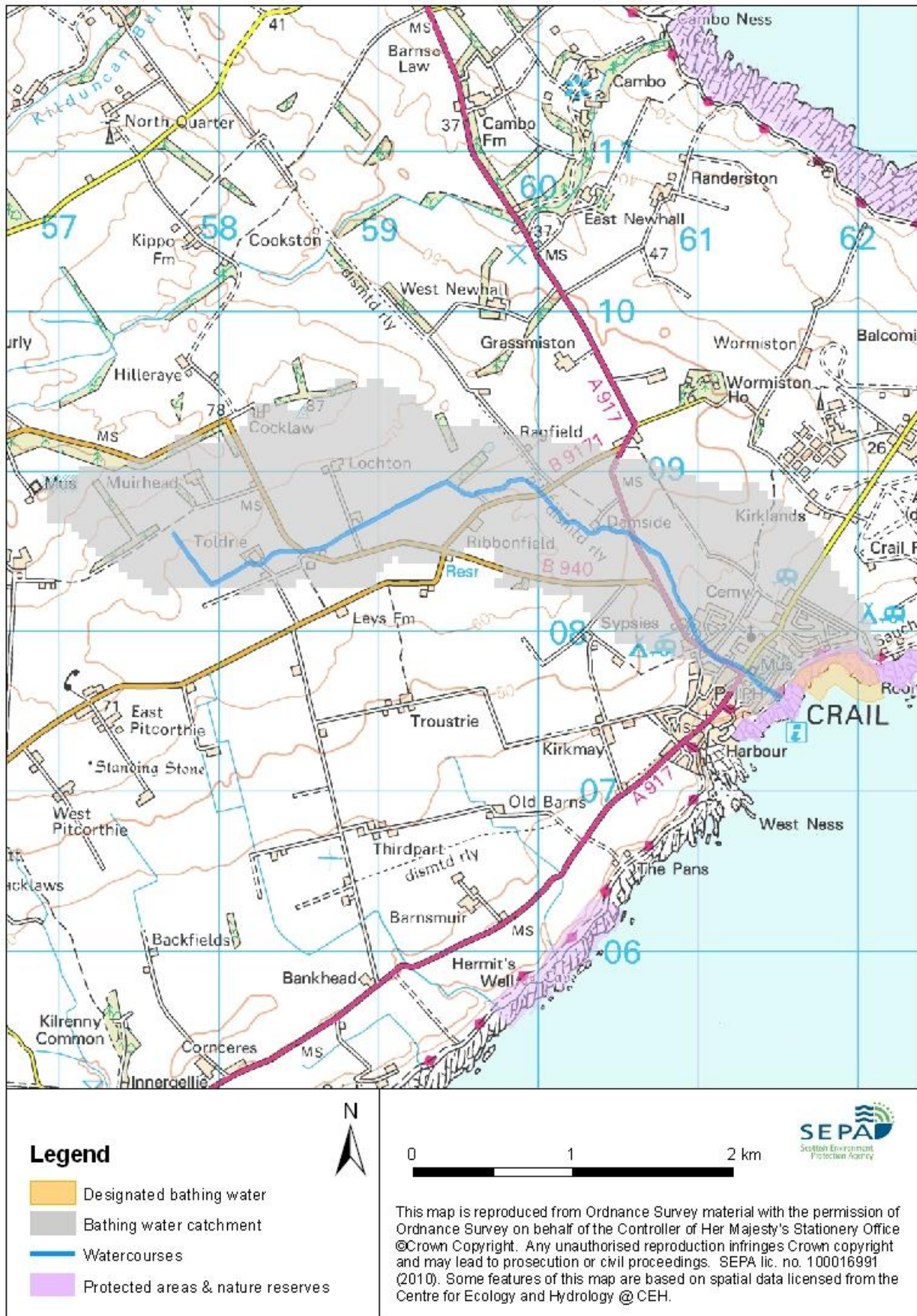
0 50 100 200 m



-  Designated bathing water
-  Bathing water sampling point
-  Bathing water sampling transect
-  Combined sewer overflow
-  Sewage pumping station
-  Watercourses



Map 2: Catchment draining into Crail (Roome Bay) bathing water



Catchment description

The catchment draining into the Crail (Roome Bay) bathing water extends to 5 km². The area is predominantly rural (93%) with arable agriculture the major land use. The main population centre in the catchment is the town of Crail. Population density outside of the towns is generally low

Average summer rainfall for the region is 296 mm compared to 331 mm across Scotland as a whole.

The main water course within the bathing water catchment is the Crail Burn (also known as Den Burn) which flows into the bathing water from a culvert at the western end of the bathing beach.

Crail bathing water lies within the Firth of Forth Ramsar site, designated as a protected area due to the internationally important bird populations. See Scottish Natural Heritage's [information service website](#)³ for more information.

The bathing water lies within a designated Shellfish Water. The Strathmore/Fife area was designated as surface water Nitrate Vulnerable Zone in 1998.

Measures to improve bathing water quality

High quality bathing waters are important so that people can enjoy Scotland's environment safely. They are also important for Scotland's tourism industry.

Recent years have seen considerable improvements in Scotland's bathing water quality, not least due to substantial investment in the sewerage system. SEPA and our partners are fully committed to continuing to improve bathing water quality.

Improving diffuse pollution from agricultural sources

Diffuse pollution from agricultural sources is normally the result of cumulative inputs of pollutants from several different sources on farms within the catchments draining to the bathing water. Consequently, tackling diffuse agricultural pollution requires concerted action across catchments. We will ensure this by working with farmers to raise awareness about the requirement to prevent and reduce pollution, and to help them identify appropriate actions for doing so.

To help co-ordinate our work to encourage and ensure action, SEPA participate in the [Diffuse Pollution Management Advisory Group](#)⁴ (DPMAG), which is a partnership of relevant authorities, land manager representatives and voluntary organisations.

The Scottish Government has also brought together nine public bodies to form [Scotland's Environmental and Rural Services](#)⁵ (SEARS). This partnership will contribute to implementing plans for tackling diffuse pollution by providing co-ordinated education and advice to rural land managers.

Additional targeted efforts will be made to improve management of diffuse pollution within catchments identified as 'priority' catchments. These are catchments where the scale of the pollution reduction needed will require planned and targeted actions to be identified and discussed with farmers concerned. Assistance will be given in these areas to identify pollution hotspots, and one-to-one advice will be provided on following the agricultural codes of good practice, which in themselves lead to compliance with these regulations. Action in priority catchments will be phased.

Agriculture is not considered to have a significant affect on this bathing water.

Improving pollution from sewage and other discharges

Most waste water collection and treatment services in Scotland are provided by Scottish Water. It has invested substantially in waste water collection and treatment provision over recent years to protect public health and the environment. Public investments in the sewerage network and in treatment works will continue to be co-ordinated through the national investment and planning process for Scottish Water, known as 'Quality and Standards'.

³ www.snh.org.uk/snhi

⁴ <http://www.sepa.org.uk/environment/water/river-basin-management-planning/who-is-involved-with-rbmp/dpmag/>

⁵ www.sears.scotland.gov.uk

All local sewage is pumped to a sewage treatment works at Kilminning (east of Crail) and discharged to the Firth of Forth via a long sea outfall. The existing outfalls at Crail Harbour and Kirk Wynd have been converted to combined sewer overflows and should only operate under exceptional circumstances such as extreme weather conditions.

In 2005, after it was identified as a potential risk to bathing water quality, Scottish Water sealed up the emergency overflow from Bow Butts pumping station which used to discharge into the Crail/Den Burn.

Improving pollution from diffuse urban sources

Urban diffuse source pollution comes from rainwater falling onto urban areas (roads, pavements, yards and roofs) becoming contaminated with pollutants on those areas, washing into surface water drains and discharging from those drains to the water environment.

Tackling this type of pollution requires substantial changes in the way urban areas are drained, and efforts to reduce the quantity of pollutants deposited on urban surfaces. Since the mid 1990s, Sustainable Urban Drainage Systems (SUDS) have increasingly been used to drain new developments. They are designed to avoid pollution of the water environment and include permeable surfaces that allow infiltration of rainwater into the ground, slowing the rate at which it drains to the water environment and trapping and breaking down pollutants. Artificial ponds or wetlands provide a final stage of treatment. Local authorities, Scottish Water and SEPA are working together to co-ordinate efforts to tackle pollution from diffuse urban sources, incorporating SUDS into local plans and encouraging partner organisations to retrofit SUDS where possible.

Diffuse urban pollution is not considered to affect this bathing water.

Responding to pollution incidents

Although rare, pollution incidents affecting bathing water quality can happen. Pollution incidents tend to be unpredictable, for example a slurry spill or sewage network failure, and can result in elevated levels of faecal indicators.

To report a possible pollution incident please use our 24 hour pollution hotline (0800 807060). In response we will investigate the incident and contact other relevant organisations. That may include Scottish Ministers, Scottish Water, the local authority and the relevant health board. Where necessary measures will be put in place to resolve the problem.

Whenever our routine sampling of bathing waters identifies elevated levels of faecal indicators there is an immediate response to check all relevant potential sources and major discharges in the immediate catchment, as well as our hydrometric information to determine whether the levels may be due to high river flows. Follow-up microbiology sampling is also undertaken of the bathing water and local water courses.

If beach users or bathers are considered to be at risk the local authority will warn the public by erecting signs at the bathing water. Information will also be available on our [website](#)⁶.

Other pollutants at the beach may include plastics and litter. Beach users are encouraged to use the bins provided or to take litter home. Beach cleaning and litter clean-up is maintained for this bathing water by Fife Council local authority.

Contact details and sources of more information

SEPA Glenrothes office

Pentland Court
The Saltire Centre
Glenrothes
KY6 2DA
01592 776910
www.sepa.org.uk

Pollution Hotline

0800 80 70 60
24 hours per day, seven days per week

Fife Council

Fife House
North Street
Glenrothes
Fife
KY7 5LT
08451 55 00 00
fife.council@fife.gov.uk
www.fife.gov.uk

⁶ <http://apps.sepa.org.uk/bathingwaters/Predictions.aspx>

Keep Scotland Beautiful

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Victoria Quay

Edinburgh

EH6 6QQ

0131 244 0396

eqcat@scotland.gsi.gov.ukwww.scotland.gov.uk/Topics/Environment/Water/15561/bathingwaters

Further information about the condition of our water environment and the actions needed to deliver improvement can be found in:

- the Scotland river basin management plan
<http://www.sepa.org.uk/environment/water/river-basin-management-planning/>
- the Forth area management plan <http://www.sepa.org.uk/environment/water/river-basin-management-planning/who-is-involved-with-rbmp/area-advisory-groups/forth/>

Good Beach Guide: www.goodbeachguide.co.uk

Blue Flag and Seaside Awards: www.keepsotlandbeautiful.org/coastal

Version Control

Version number:	Date:	Next review due:
1.0	Dec 2009	
1.1	March 2014	
1.2	June 2015	