


Bathing water profile:

Lossiemouth (East)

<p>Bathing water: Lossiemouth (East)</p>	
<p>EC bathing water ID number: UKS7616076</p>	
<p>Location of bathing water: UK/Scotland/Moray (Map1)</p>	
<p>Year of designation: 2008</p>	
<p>© Copyright Nick Forwood and licensed for reuse under this Creative Commons Licence.</p>	
<p>Bathing water description</p> <p>Lossiemouth (East) bathing water is situated on the north coast of Moray to the east of the town of Lossiemouth, near Elgin. The sandy beach is approximately 2 km long and is prized for its unspoilt golden sands. It is popular in particular with surfers and walkers. The bathing water is located close to a caravan park (Map 1). It was designated as a bathing water in 2008.</p> <p>During high and low tides the approximate distance to the water's edge can vary from 0–140m. The beach slopes gently towards the water. For local tide information see: http://easytide.ukho.gov.uk/EasyTide/</p> <p>Our monitoring point for taking water quality samples is located at the western end of the designated area (Grid Ref NJ 24050 70500) 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 agricultural run-off and 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.

Bathing is not advisable during or following (one or two days after) rainfall. Bathing or swimming after storms, floods or heavy rainfall should be avoided as the risk of illness following short term water pollution is increased.

Cyanobacteria (blue-green algae)

Marine waters are not at risk of excessive production of cyanobacteria.

Algae

Current information suggests that this bathing water is not at risk of excessive production of macroalgae 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'.

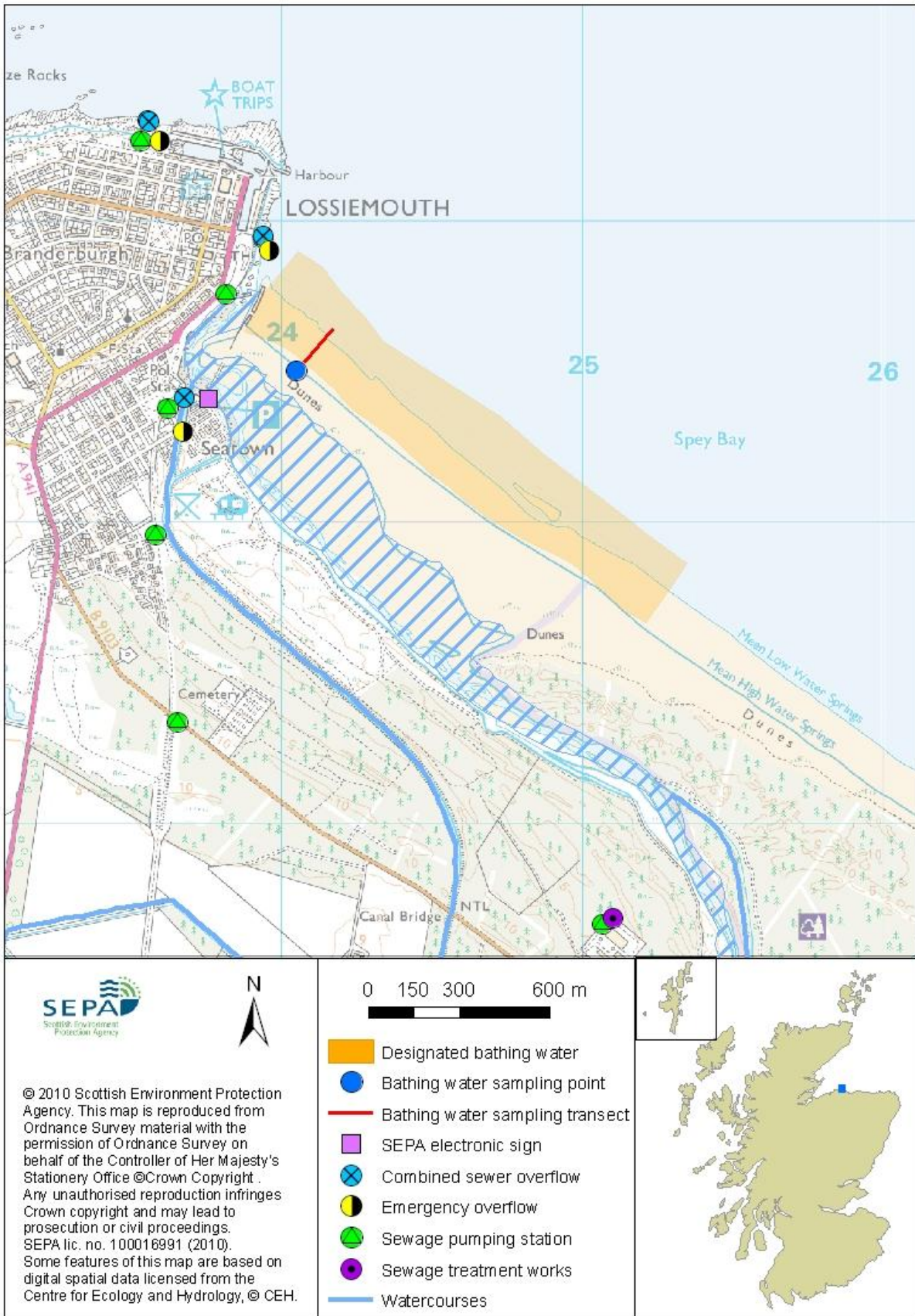
Daily water quality forecasts

Lossiemouth (East) bathing water will be included in the signage network from 2011.

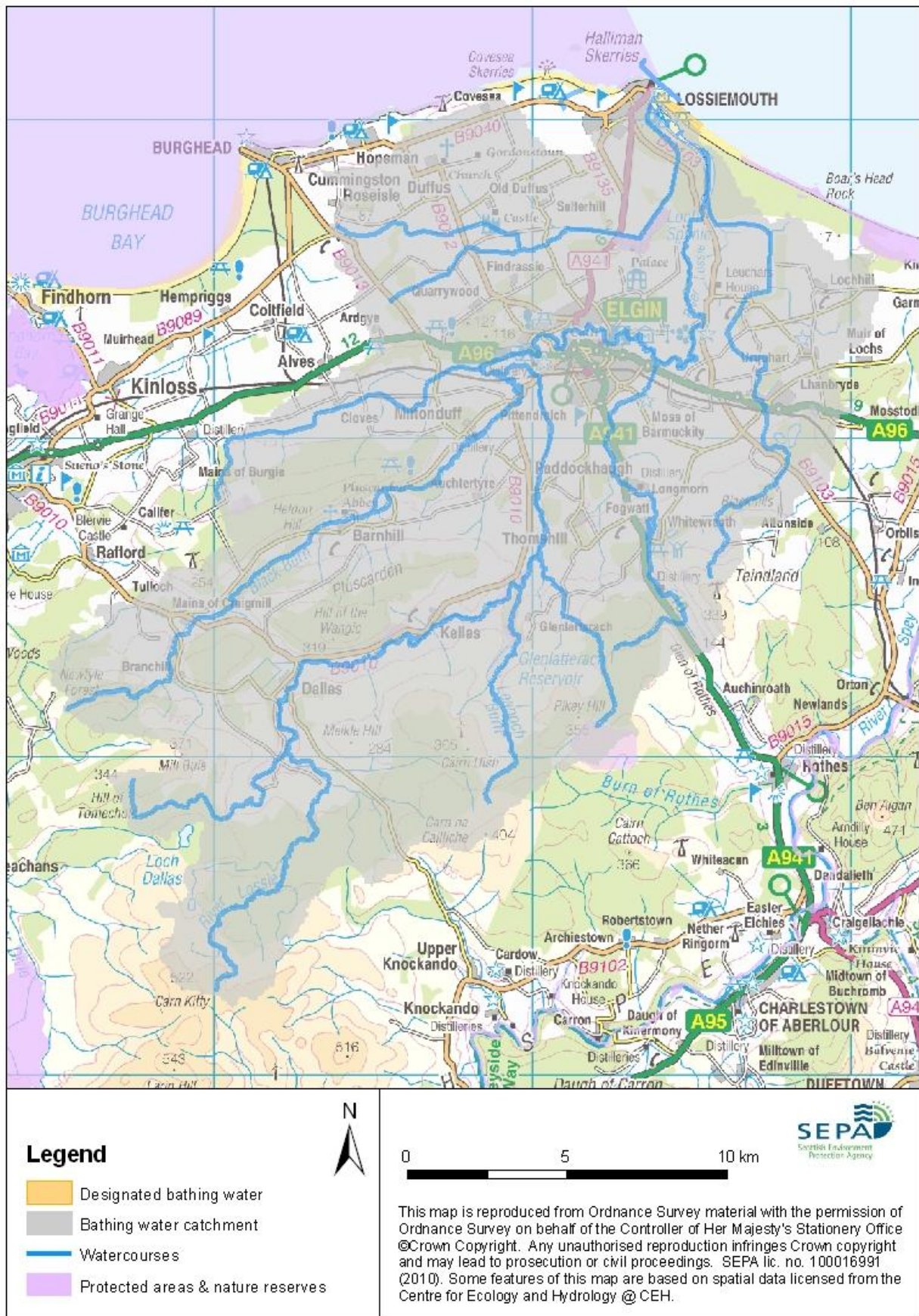
Throughout the bathing season we will display daily water quality predictions on the electronic message sign (Map 1). These water quality predictions will also be available on our [website](#) or via the Beachline phone number (08452 30 30 98).

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

Map 1: Lossiemouth (East) bathing water



Map 2: Catchment draining into Lossiemouth (East) bathing water



Catchment description

The catchment draining into the Lossiemouth (East) bathing water extends to 380 km². The catchment varies in topography from high hills (maximum elevation 520 metres) in the south to low-lying plains (average elevation 5 metres) along the coast. Average summer rainfall for the region is 267 mm compared to 331 mm across Scotland as a whole. Due to the nature of the catchment there tends to be localised, frequently heavy rainfall at times.

The main water courses in the bathing water catchment are the River Lossie and the Spynie Canal both of which flow across the back of the beach and into the sea at the western end of the bathing water.

The area is predominantly rural (96%). Of the rural land, 33% is woodland, 21% arable agricultural and 28% grassland. There is mixed farming through the catchment. Approximately 2% of the bathing water catchment is urban. The main population centre is the city of Elgin which is 9 km inland to the south of the bathing water. The town of Lossiemouth is situated 500 metres to the west of the designated bathing water. Population density outside of the towns is generally low. The area also includes the site of RAF Lossiemouth (Map 2).

We recently made use of new DNA tracing techniques which helps us identify whether sources of faecal pollution are human or animal in origin. In 2008, this method was used at Lossiemouth (East) and at sites in the river catchment which enables us to target further investigations and identify appropriate courses of corrective action. Results indicate that human and animal sources are likely to be affecting bathing water quality.

There are several protected areas either fully or partially within the bathing water catchment including one Special Protection Area, 12 Sites of Special Scientific Interest and one Ramsar site (Map 2). The Spynie Canal is important for Greylag Geese and is a designated Ramsar site and Special Protection Area. These protected areas are not expected to impact on water quality at the Lossiemouth (East) bathing water. For further information on protected areas in this catchment see Scottish Natural Heritage's [information service website](#)³.

The catchment also partially lies within a Nitrate Vulnerable Zone.

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

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

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.

There are many farms in the catchment draining to the Lossiemouth (East) bathing water, most of which support mixed farming although there are predominantly livestock farms in the upland areas. Pollution from agricultural run-off is thought to occur mostly in the River Lossie and this is believed to be a primary source of pollution at the bathing water.

The catchment draining to Lossiemouth (East) bathing water is within the Moray Coastal catchment. Work to address diffuse pollution issues in this catchments is expected to be completed by 2027.

The Spynie Canal and part of the River Lossie sit within a Nitrate Vulnerable Zone and as such will already have measures in place to reduce and prevent further nitrate contamination. For further information visit the [Scottish Government's Website](#).

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'.

In 2002, a new sewage treatment works was completed at Oakenhead Wood to the east of Lossiemouth. This provides full biological treatment for sewage from Lossiemouth and Elgin, with the final effluent being discharged via a long sea outfall 1.4 km from Lossiemouth (East) beach.

There are several combined sewer overflows and emergency overflows that discharge in the vicinity of the bathing water, to either the sea, the River Lossie or the Spynie Canal.

Scottish Water has recently undertaken a study of Lossiemouth (East) bathing water to determine whether any improvements are required to their assets to meet the revised Bathing Waters Directive. The study has concluded that improvements to Scottish Water assets are not required.

The many private septic tanks which discharge to the River Lossie and to the Spynie Canal pose a potential threat to the bathing water quality.

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.

The River Lossie, which discharges to this bathing water, is likely to be affected by surface water run-off from the urban area of Elgin through which it runs.

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 Moray Council.

Contact details and sources of more information

SEPA Elgin office

28 Perimeter Road
Pinefield
Elgin
IV30 6AF
01343 547663
www.sepa.org.uk

Pollution Hotline

0800 80 70 60
24 hours per day, 7seven days per week

Keep Scotland Beautiful

01786 471333
beach@ksbscotland.org.uk
www.keepsotlandbeautiful.org

Moray Council

Council Office
High Street
Elgin
Moray
IV30 1BX
01343 543451
hotline@moray.gov.uk
www.moray.gov.uk

Scottish Government

Victoria Quay
Edinburgh
EH6 6QQ
0131 244 0396
egcat@scotland.gsi.gov.uk
www.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 North Highland area management plan <http://www.sepa.org.uk/environment/water/river-basin-management-planning/who-is-involved-with-rbmp/area-advisory-groups/north-highland/>

Good Beach Guide: www.goodbeachguide.co.uk

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

Version Control		
Version number:	Date:	Next review due:
1.1	April 2013	
1.2	May 2014	
1.3	June 2015	

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