

## Bathing Water Profile for Thurso Bay (Central)

Thurso, Scotland

Current water classification <https://www2.sepa.org.uk/BathingWaters/Classifications.aspx>

### Description

Thurso Bay (Central) bathing water is situated on the north coast of Scotland adjacent to the town of Thurso. The designated bay is less than 1 km long and extends from Rockwell Point in the west to Little Ebb in the east. The beach is popular with bathers and water sport enthusiasts.



During high and low tides the approximate distance to the water's edge can vary from 0–160 metres. The sandy beach slopes gently towards the water.

### Site details

Local authority	Highland Council
Year of designation	2008
Water sampling location	ND 11697 68860

### Catchment description

The catchment draining into the Thurso bathing water extends to 487 km<sup>2</sup>. The catchment varies in topography from hills (maximum elevation 440 metres) in the south to the low-lying land (average elevation 5 metres) along the coast. The main river within the bathing water catchment is the River Thurso which discharges to the east of the designated bathing water.

Land use in the catchment is mainly split between rural land and bog. The principal rural land uses in the area are improved grassland (14%), shrub (12%) and coniferous woodland (10%). The upper catchment around Halkirk is mainly sheep farming with beef farming around Thurso. Less than one percent of the bathing water catchment is urban. The main population centre is the town of Thurso situated adjacent to the bathing water. Population density outside of Thurso is generally low (Map 2).

There are several protected areas either fully or partially within the bathing water catchment including two Special Areas of Conservation, two Special Protection Areas, 17 Sites of Special Scientific Interest, two Ramsar sites and two bird reserves (Map 2).

### Risks to water quality

The principal risks and source of wet weather driven short term pollution at this bathing water arise from surface water urban drainage, agricultural run-off, combined sewer overflows and treated sewage effluent.

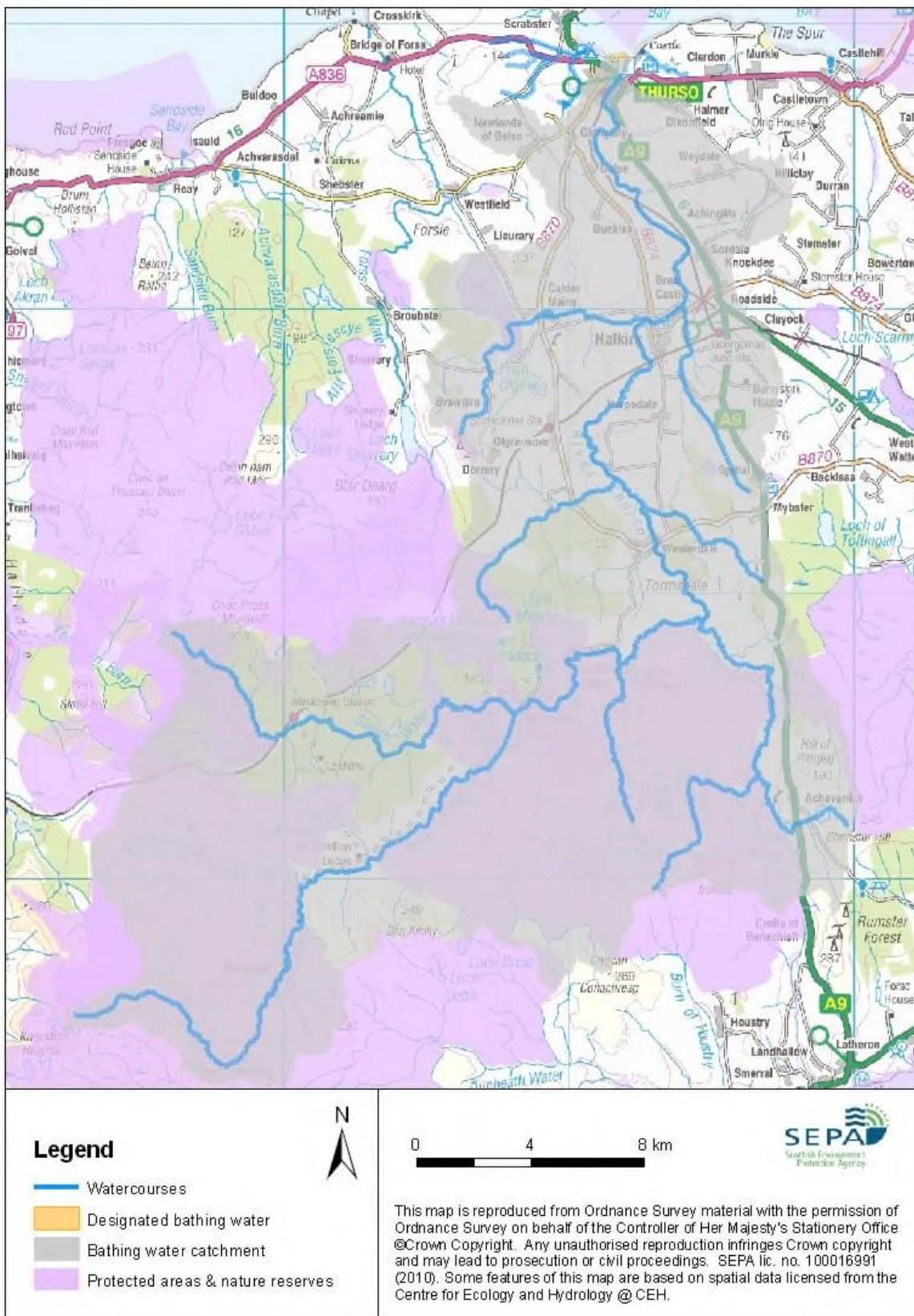
There is a risk that water pollution may occur after heavy rainfall. **Bathing is not advised during or 1-2 days after heavy rainfall. This is due to the risk to bathers' health from water pollution.**

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.

Map 1: Thurso Bay (Central) bathing water



Map 2: Catchment draining into Thurso Bay (Central) bathing water



## **Improving bathing water quality**

### **Improving diffuse pollution from agricultural sources**

Diffuse pollution from agricultural sources is the result of rain driven events causing cumulative inputs of pollutants to rivers and streams.

There is potential for agricultural diffuse pollution to occur in the Thurso River which could impact on the bathing beach during and following heavy rain.

Farm visits started in the Thurso & Wick priority catchment in 2022 and are ongoing. These visits look to identify diffuse pollution sources and pathways. Mitigation measures have been agreed with land managers to reduce the risk of bacterial pollution on water quality.

SEPA has observed significant changes in land management practice within the catchment. SEPA will continue to work with the farmers to reduce the risk of pollution to the bathing water.

### **Improving pollution from sewage and other discharges**

Scottish Water provides most waste water collection and treatment services in Scotland.

Since 2006, sewage from the town of Thurso has been treated at and discharged from Thurso sewage treatment works. Prior to this, sewage effluent was discharged to the sea via a long sea outfall in Thurso Bay. The long sea outfall is now used as a combined sewer overflow and spills intermittently during wet weather. During or after extremely high rainfall, diluted effluent can be discharged to the River Thurso at Thurso Headworks. Both of these overflows, together with other intermittent discharges in the area, have the potential to affect the bathing water quality during wet weather.

Private septic tanks in the Thurso area have the potential to impact on bathing water quality. In 2009 we investigated intermittent discharges of untreated sewage and farm effluent.

### **Improving pollution from diffuse urban sources**

Urban diffuse source pollution comes from contaminated rainwater discharging to rivers and streams.

The River Thurso is known to be affected by surface water run-off from the urban area through which it runs. It therefore could potentially affect bathing water quality.

SEPA, local authorities and Scottish Water are working together to tackle urban diffuse pollution. Sustainable Urban Drainage Systems (SUDS) have been incorporated into local plans and partner organisations have been encouraged to retrofit SUDS where possible.

### **Cyanobacteria (blue-green algae)**

Marine waters are not at risk of cyanobacteria overproduction.

### **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 summer months. This is a naturally occurring phenomenon. Most species common to the UK are harmless. The Marine Conservation Society advises to 'look but don't touch'.

**Responding to pollution incidents**

Please use our 24 hour hotline (0800 80 70 60) to report pollution. SEPA 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.

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.

SEPA will investigate whenever our sampling identifies pollution.

Beach users are encouraged to use the bins provided or to take litter home. Beach cleaning and litter clean-up is maintained by Highland Council for this bathing water.

**Contact details and information sources**

<p><b>SEPA office</b> Strathbeg House Clarence Street Thurso Caithness KW14 7JS 01847 894422 <a href="http://www.sepa.org.uk">www.sepa.org.uk</a></p>	<p><b>Highland Council</b> Glenurquhart Road Inverness IV3 5NX 01349 886606 <a href="mailto:service.point@highland.gov.uk">service.point@highland.gov.uk</a> <a href="http://www.highland.gov.uk">www.highland.gov.uk</a></p>	<p><b>Keep Scotland Beautiful</b> 01786 471333 <a href="mailto:beach@ksbscotland.org.uk">beach@ksbscotland.org.uk</a> <a href="http://www.keepsotlandbeautiful.org">www.keepsotlandbeautiful.org</a></p>
<p><b>Scottish Government</b> Victoria Quay, Edinburgh, EH6 6QQ 0131 244 0396 <a href="mailto:eqcat@scotland.gsi.gov.uk">eqcat@scotland.gsi.gov.uk</a> <a href="http://www.scotland.gov.uk/Topics/Environment/Water/15561/bathingwaters">www.scotland.gov.uk/Topics/Environment/Water/15561/bathingwaters</a></p>		
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