

46 Portobello (West)



46.1 Background Information

Portobello (West) was identified as a bathing water in 1999. In 2007 it was of good quality for the sixth consecutive year. There was one mandatory exceedance on 2nd August 2007 which was considered to be due to heavy rain causing CSOs to operate.

Bathing water quality at this site has been successively improved over many years by progressive enhancement of sewage treatment and sewerage infrastructure. Edinburgh's STW has effluent disinfection and does not threaten water quality. The remaining water quality threats are from local sewage pumping stations, the local Figgate Burn and potentially contaminated surface water run-off from adjacent urban areas. Actions to address these issues are detailed in the later sections of this document.

In March 2006 the revised Bathing Water Directive (2006/7/EC) entered into force and was enacted in the UK by Regulations in March 2008. Key features are tighter microbiological standards to be met by 2015 and increased provision of public information.

Compliance and pollution improvement required for the designated EU Bathing Waters will be co-ordinated through the Water Framework Directive (WFD) programme of measures which will form part of the river basin management plan. The programme of measures will outline measures (actions) that are being taken to protect and improve the water environment in the river basin district. This EU designated bathing water (protected area) pollution reduction plan will identify measures relevant to this bathing water and associated water bodies that are being undertaken as part of the programme of measures.

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Poor	Good	Good	Poor	Good	Good	Good	Good	Good	Good	Good

Table 46A: Record of Compliance for Portobello (West), 1997 – 2007.



Figure 46A: Map of Portobello (West) designated bathing beach and surrounding local area

46.2 Results for 2007

Portobello (West) Results				
Date	Total Coliforms (colonies/100ml)	Faecal Coliforms (colonies/100ml)	Faecal Streptococci (colonies/100ml)	Abnormal Weather Waiver
21052007	10	10	2	-
01062007	>15000	3700	750	Yes
04062007	1200	100	90	-
06062007	340	80	8	-
15062007	1060	380	161	-
18062007	2800	750	142	-
25062007	7200	1900	720	-
28062007	760	230	42	-
04072007	480	50	50	-
08072007	20	<10	6	-
11072007	60	20	2	-
20072007	310	260	14	-
31072007	490	320	302	-
02082007	40	30	8	-
07082007	310	50	54	-
15082007	540	270	170	-
20082007	1255	170	16	-
22082007	200	90	54	-
29082007	1000	800	308	-
04092007	90	50	44	-
Number of Samples taken : 20				

Table 46B: Microbiological results for Portobello (West) bathing water, June – September 2007

46.3 Scottish Water Assets

Seafeld STW provides tertiary treatment and is located to the west of the bathing water. Fillyside and Joppa pumping stations lie to the west and east of the bathing water respectively. Eastfield Pumping Station CSO discharges to the east of the bathing water.

Duddingston and Mountcastle Drive CSOs both discharge into the Figgate Burn that enters the bathing water between the west and central bathing waters. Duddingston Road CSO was improved in 2003 while Mountcastle Drive CSO is currently scheduled for improvement under the Scottish Water Quality & Standards III investment programme.

46.4 Other Discharges

The Figgate Burn flows onto the beach between the two designated bathing waters, and is known to be a source of faecal contamination due to CSOs that discharge into the burn.

The SEPA/Scottish Water working group identified a pigeon roost at Baileyfield Bridge as an input of faecal coliforms. In 2003 this was netted to prevent pigeon faeces from being washed into the surface water road drains and into the burn.

46.5 Agriculture

Agriculture is not considered to have any significant impact on this bathing water.

46.6 Hydrometric Network

Figure 34B shows a map of the hydrometric network of the surface water catchment area of Portobello (West) bathing waters.

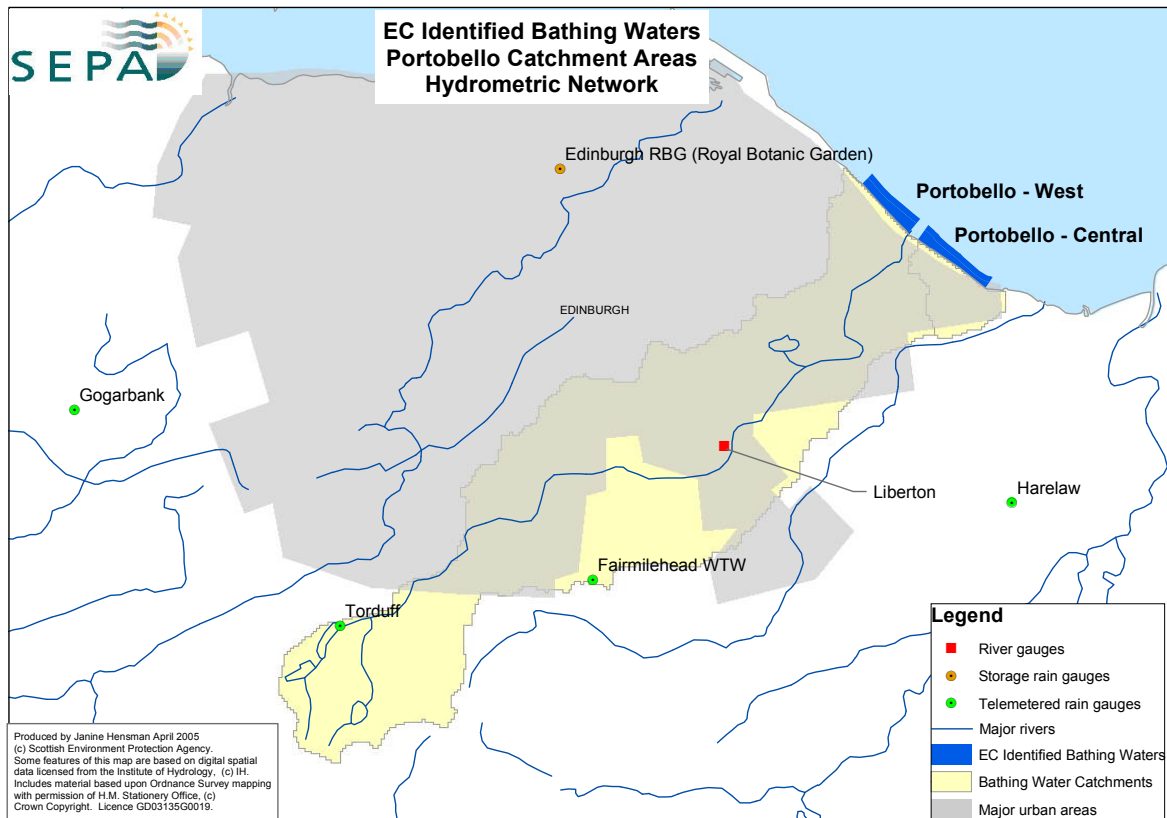


Figure 46B: Hydrometric map of Portobello (West) and surrounding area

46.7 Further Investigations

A joint SEPA/Scottish Water workgroup continues to determine the impact of storm overflows and other inputs to the Figgate Burn with a view to reducing these sources. A programme of CSO upgrading was carried out to reduce spill frequency. Several other sources of faecal contamination to the burn were identified and removed. This resulted in improved sanitary quality in the Figgate Burn, with a parallel improvement in bathing water quality at Portobello (West) as measured by the percentage of samples meeting the EU guideline standard for faecal coliforms.

A full review of all unsatisfactory intermittent discharges in the catchment was carried out and a new tidal waters model was set up, which has been used in conjunction with a freshwater model of the Figgate Burn to identify improvements required. The group has concluded that no further improvements are required at CSOs in the vicinity of the bathing water and that background bacterial levels in the Figgate Burn are hindering the bathing water from reaching excellent quality. A further sampling programme is planned for the Figgate Burn to try to trace the source of these elevated bacterial levels.

SEPA will continue to monitor these waters as per the requirements of the EC Bathing Waters Directive and will continue to ensure that all sewage discharge consent conditions are met.

46.8 Response to Failure

Portobello (West) has been assessed for the 2008 season as being of medium risk of failing the mandatory standard.

Should there be a mandatory failure, there will be an immediate response to check all the relevant potential sources in the catchment area to confirm the reason, including follow-up microbiology sampling of the bathing water and nearby river inputs.

The regional Environmental Quality Unit will co-ordinate a response in conjunction with the local Environmental Protection and Improvement team and Environmental Science functions and post the result of the investigation and actions arising on the SEPA bathing waters internet site.