

## 39 Kingsbarns



### 39.1 Background Information

Kingsbarns was identified as a bathing water in 1999. It achieved excellent quality for the sixth year running in 2007.

Kingsbarns has a small Sewage Treatment Works (STW) with effluent discharging via an outfall to low water mark to the north of the bathing water. The reason for the poor quality in 2001 was thought to be an unusual combination of weather and tidal conditions directing the effluent plume into the bathing water. To ensure compliance in 2002, Scottish Water added chemical disinfection as an interim measure and increased the length of the outfall. A new STW was commissioned in the spring of 2006. This consists of a submerged aerated media system followed by sand filtration and UV disinfection of the final effluent during the bathing season. This tertiary treatment should ensure continuing excellent water quality.

This beach was “recommended” in the 2008 good beach guide.

In March 2006 the revised Bathing Water Directive (2006/7/EC) entered into force and was enacted in the UK by Regulations in 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
Good	Good	Excellent	Good	Poor	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent

**Table 39A:** Record of Compliance for Kingsbarns, 1997 – 2007.



**Figure 39A:** Map of Kingsbarns designated bathing beach and surrounding local area.

### 39.2 Results for 2007

Kingsbarns Results				
Date	Total Coliforms (colonies/100ml)	Faecal Coliforms (colonies/100ml)	Faecal Streptococci (colonies/100ml)	Abnormal Weather Waiver
28052007	6	4	2	-
07062007	2	2	<2	-
15062007	84	76	128	-
19062007	28	12	14	-
21062007	800	100	74	-
26062007	82	82	40	-
29062007	12	<2	<2	-
02072007	140	86	140	-
07072007	142	66	4	-
17072007	1700	1700	56	-
19072007	152	48	4	-
24072007	166	70	6	-
31072007	10	10	<2	-
03082007	4	2	2	-
07082007	90	54	4	-
13082007	14	14	2	-
24082007	12	6	<2	-
29082007	8	8	2	-
31082007	82	66	10	-
04092007	8	2	4	-
Number of Samples taken 20				

**Table 39B:** Microbiological results for Kingsbarns bathing water, June – September 2007

### 39.3 Scottish Water Assets

A new STW was commissioned in the spring of 2006. It comprises a submerged aerated media system, followed by sand filtration and UV disinfection of the final effluent during the bathing season. This tertiary treatment should ensure continuing excellent water quality.

### 39.4 Other Discharges

The Cambo Burn receives a number of septic tank discharges that may pose a slight risk to bathing water quality, as the watercourse meets the sea 0.5 km south of the designated waters. There are unlikely to be any other major threats to the bathing water quality of Kingsbarns.

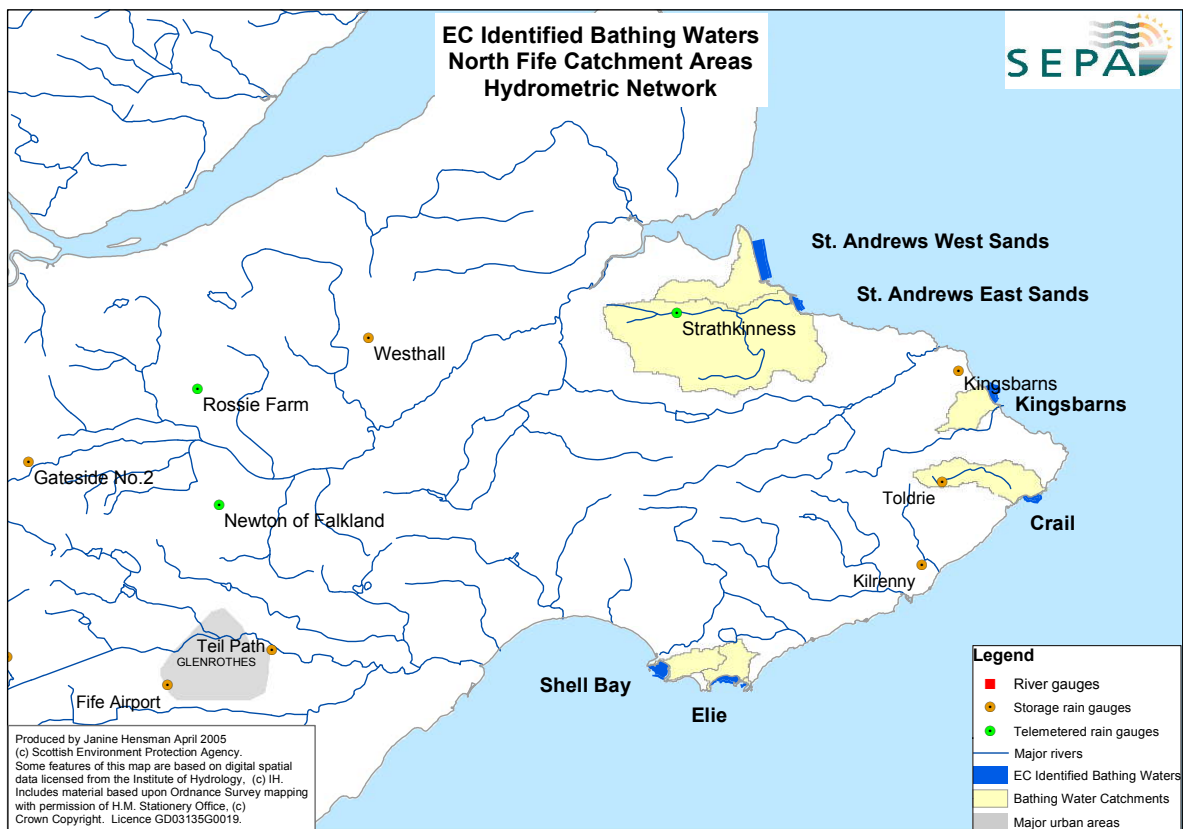
Investigations into the drainage arrangements for the Golf Club House at Kingsbarns have been undertaken by SEPA and it has been concluded that the Club House does not pose a threat to the bathing water quality.

### 39.5 Agriculture

The area is largely arable farmland and agriculture is not considered to have any significant impact on this bathing water.

### 39.6 Hydrometric Network

Figure 39B shows a map of the hydrometric network of Kingsbarns bathing water and surrounding area.



**Figure 39B:** Hydrometric map of Kingsbarns and surrounding area

### 39.7 Further Investigations

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.

### **39.8 Response to Failure**

Kingsbarns has been assessed for the 2008 season as being of low 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.