

Bathing Water Profile - Silverstrand Beach (2014)

Bathing Water:	Silverstrand Beach
Bathing Water Code:	IEWEBWC170_0000_0100
Local Authority:	Galway City Council
River Basin District:	Western
Monitoring Point:	124854E, 222723N

1. Profile Details:

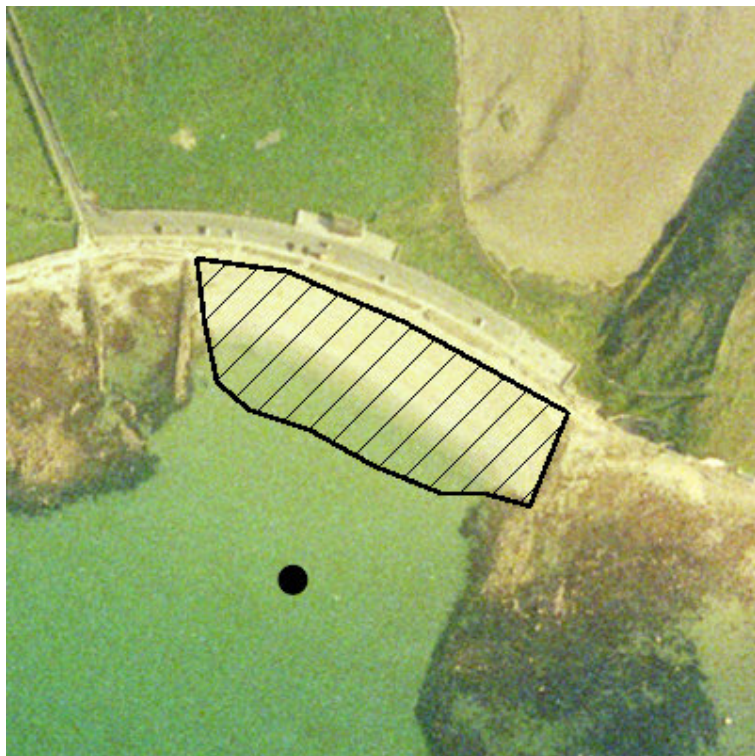
Profile Id:	BWPR00265	Toilets Available:	Yes
Year Of Profile:	2014	Car Parking Available:	Yes
Year Of Identification	1992	Disabled Access:	Yes
Version Number:	1	First Aid Available:	Yes
		Sensitive Area:	Yes
		Dogs Allowed:	No
		Lifesaving Facilities:	Yes

Figure 1: Bathing Water



2. Bathing Water Details:

Map 1: Bathing Water Location & Extent



Bathing Water location and extent:

Silverstrand Beach is located on the outskirts of Galway City between Salthill and Barna, and on Galway Bay, a Special Area of Conservation. To the east of the site lies the village of Barna, and access to the beach is via the R336, the Barna Road.

Main features of the Bathing Water:

Type of Bathing Water

It is one of the most popular bathing waters in the vicinity of the city, particularly for residents on the west side of the city, and is also particularly suited to young families. It has a safe, shallow, sandy beach of approximately 0.25km bounded on one side by a cliff and the other by rocks and has achieved blue flag status along with Salthill in recent years. It is suitable for swimming at low tide but the beach is largely covered during high tides.

There is a promenade with public parking capacity for about 60 vehicles. It is lifeguarded daily from mid-May to end of August from 11-7pm, and the lifeguards provide emergency first aid services. Public toilet facilities are provided close to the lifeguard facilities, and this building also houses an open public changing facility. Picnic tables are provided on the southern end of the carparking area.

Flora/Fauna, Riparian Zone

Vegetation is sparse along the upper zone of the sandy shore. On the rocky outcrops, colonies of mussels, periwinkles, limpets and common barnacles can all be found. Small stands of seaweed can be present on both the strand and the rocky outcrops, but they rarely pose a nuisance to bathers.

Birds commonly found on or along the beach include Grey Herons, Curlews, Gannets, Herring Gulls, and Common Terns.

Water Depth

The water depth at full tide is 2m approximately

Tidal Range

The beach has a macro-tidal range (>4m) with medium and maximum depths of the bathing area varying in relation to the tide height and position.

Land Use

Land use immediately adjacent to the beach is predominantly pasture and used for grazing cattle and horses. Beyond this, the area is of urban fabric, with the residential estates, public parks and private domestic dwellings.

Sensitive Area

The entire beach area lies within the Inner Galway Bay, Special Protected Area and Galway Bay Complex, a Special Area of Conservation and houses a number of habitats of high conservation status, being listed in Annex I of the EU habitats Directive.

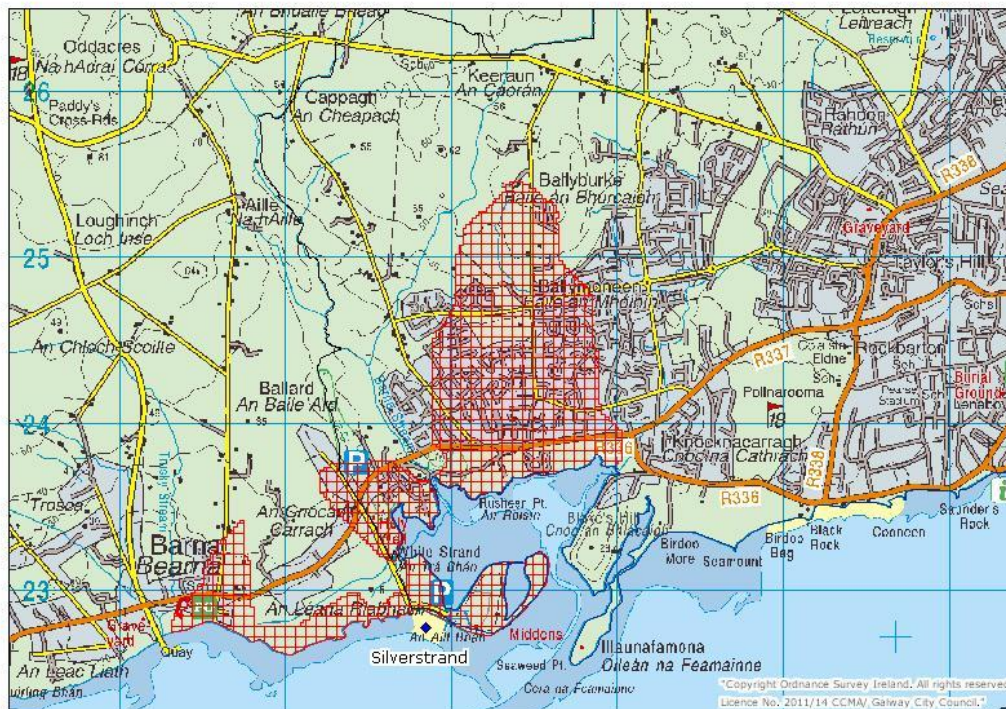
Max. number of visitor during a day in high season: 600 approx

Approx number of visitor during the bathing season: 25,000 approx

Activities available at the Bathing Water:	The beach is used year round for swimming and windsurfing. The tidal inlet of Lough Rusheen, located behind Silverstrand Beach is a long established centre for water sports. Bird watching is very popular, as the waters attract up to 1300 feeding waterbirds at low tide during the winter months. Other activities in Lough Rusheen include pony trekking. The beach itself faces directly across Galway Bay and boasts breathtaking views stretching for miles across the bay to County Clare and the Aran Islands.
Contributing catchment details:	<p>Silverstrand Beach is located in the townland of Derryloney, and close to the border with Galway County Council. It is located in the Inner Galway Bay coastal water body (WE_170_0700), in the Western River Basin District. The contributing catchment is approximately 3.5 km sq in area. The entire beach area lies within the Inner Galway Bay, Special Protected Area and Galway Bay Complex, a Special Area of Conservation and houses a number of habitats of high conservation status, being listed in Annex I of the EU habitats Directive. Water Bodies Draining to Bathing Water Barna stream to the north is the main freshwater input into the coastal waters and close to the beach area. Surface water drainage from the surrounding residential areas also contribute. The catchment consists of relatively gently sloping hills.</p> <p>The land in the catchment area comprises gently sloping hills, and the predominant soil group of the area is brown podzolic. Bedrock type is murvey granite, and this is overlaid with granite till.</p> <p>Barna stream to the north is the main freshwater input into the coastal waters and close to the beach area. Surface water drainage from the surrounding residential areas also contribute.</p> <p>Mean annual rainfall at Athenry weather station, for the period 1981 - 2010 was 1192.9mm, and the month with the highest mean precipitation during this period was October with a mean 128.9mm, while April had the lowest mean precipitation at 72mm. Rainfall for June during 2012 was 175.8mm, significantly higher than the mean for June for the period 1981-2010, at 79.6mm.</p>
Monitoring point details:	The grid reference for the nominal bathing water monitoring point is Latitude 53.2496, Longitude -9.1269. The location of the bathing water point is in the centre of the beach.
Reason for selection of the monitoring point:	The location of the bathing water monitoring point is the location where most bathers are expected to use the bathing water.
Water quality assessment:	<p>The bathing water quality monitoring carried out at Silverstrand since 2003 has shown consistently good water quality.</p> <p>For the 2012 bathing season, Silverstrand achieved good water quality status, and complied with EU guide and mandatory values. For the 2011 bathing season, Silverstrand had sufficient water quality status, and good status for the previous 8 seasons.</p> <p>All water quality samples taken during the 2013 bathing season were good.</p>

3. Identified Pressures:

Map 2: Bathing Water Catchment



3.1 Potential pressures in the catchment assessed as posing no risk:

Description:	Runoff from adjacent agricultural lands
Source:	Runoff from surrounding agricultural lands
Type:	Run off from agricultural land
Short Term Pressure:	No

3.2 Potential pressures in the catchment assessed as posing risk:

Description:	Use of the beach by dog walkers and subsequent dog fouling may pose a risk to bathing water quality.
Source:	Domestic Animals on Beach
Type:	Domestic animals on beach
Short Term Pressure:	Yes
Nature:	Low Risk
Frequency:	< 1 per season
Duration:	< 24 hours
Risk Assessment Methodology:	Local Knowledge and history at beach.
Risk Assessment Results:	Low, due to bye laws in place.
Details:	Risk is low, as dogs are restricted on beach during bathing season.
Management Measures:	Bye-laws have been introduced which prohibits dogs from city beaches between 9am and 8pm during the months of May – September inclusive. Enforcement and awareness will be increased in advance of each bathing season.

Description:	The mutton island waste water treatment plan services the city of Galway and is located on Mutton Island, 4.8km from the beach. There is a potential risk of pollution, due to failure of equipment, an overflow discharge or insufficient wwtp capacity.
Source:	Mutton Island Waste Water Treatment Plant
Type:	Waste Water Treatment plant

Short Term Pressure:	Yes
Nature:	Low Risk
Frequency:	< 1 per season
Duration:	< 24 hours
Risk Assessment Methodology:	EPA recommended Assessment Methodology
Risk Assessment Results:	The discharge is considered a long outfall. There is full treatment at the plant therefore the microbial pollution potential is very low. The 95th percentile monitoring result for intestinal intercocci for the period 2010-2013 is between 1-40, therefore the WQI grade is A. The microbial pollution risk (MPR) for this discharge is therefore Very Low. This result is inconsistent with the water quality results obtained at Salthill during blue flag water quality monitoring.
Details:	Very low risk of pollution from Mutton Island Treatment Facility.
Management Measures:	A strong line of communication exists between the management at the treatment plant and the environment section of Galway City Council, so that in the event of a failure or discharge, a water sample is taken and bathers are notified of potential risk to water quality and advised not to use the bathing water by signage at the beach. There are proposals for upgrading works at Mutton Island treatment plant and these works should commence in 2014.

Description:	The public toilets at Silverstrand are on a septic tank system, with an overflow pipe which discharges into Rusheen Bay adjacent to the beach.
Source:	Public Toilets - on-site waste water treatment system
Type:	Septic Tank
Short Term Pressure:	Yes
Nature:	Moderate Risk
Frequency:	<1 per season
Duration:	< 48 hours
Risk Assessment Methodology:	EPA recommended methodology
Risk Assessment Results:	The discharge is considered a short outfall, with no treatment therefore the microbial pollution potential is high. The 95th percentile monitoring result for intestinal intercocci for the period 2009-2012 is between 1-40, therefore the WQI grade is A. The microbial pollution risk (MPR) for this discharge is therefore inconsistent, and is assumed to be moderate.
Details:	There is a moderate risk of a discharge/overflow from the septic tank system, and based on water quality results the frequency of occurrence is very low. The primary risk factor is high usage of the facilities and inadequate maintenance.
Management Measures:	Regular inspection and maintenance to ensure that the septic tank is emptied on a frequent basis. Site inspections will be increased during periods of heavy usage. In the event of a discharge, bathers shall be notified of potential risk to water quality and advised not to use the bathing water by signage at the beach, and by informing lifeguards on duty. Longterm proposals to remove the on-site system and connect the toilets to the main drainage scheme are dependant on funding.

Description:	The gentian hill pumping station, with storm overflow is located >1km from the beach. There is no history of overflows with this station and no evidence of it affecting bathing water.
Source:	Gentian Hill Pumping Station
Type:	Sewer Networks
Short Term Pressure:	Yes
Nature:	Moderate Risk
Frequency:	<1 per 5 seasons
Duration:	< 48 hours
Risk Assessment Methodology:	EPA methodology

Risk Assessment Results:	Discharge is considered a long outfall as it is greater than >1km from the beach. There is no treatment here, therefore the microbial pollution potential is moderate. The 95th percentile monitoring result for intestinal intercocci for the period 2006-2009 is between 1-40, therefore the WQI grade is A. The microbial pollution risk (MPR) for this discharge is therefore inconsistent, and is considered moderate.
Details:	There is a moderate risk of a discharge/overflow from the pumping station, and based on water quality results the frequency of occurrence is very low. The primary risk factor is periods of heavy rainfall, or failure of pumping equipment.
Management Measures:	Regular inspection and maintenance of the pumping equipment is in place. Site inspections will be increased during periods of heavy rainfall when risk of overflow is greatest. In the event of a discharge, bathers shall be notified of potential risk to water quality and advised not to use the bathing water by signage at the beach, through the media, and by informing lifeguards on duty.

3.3 Other Risks:

Assessment of the potential for proliferation of cyanobacteria: N/A

Proposed management measures for cyanobacteria: The beach will be monitored and the HSE consulted to determine the acceptability and any potential health risks, and where required, consideration will be given to the removal of excess macro-algae. The public will be informed through the posting of notices at the beaches.

Assessment of the potential for proliferation of macroalgae: N/A

Proposed management measures for macroalgae: Not Applicable. Monitoring of the beach since 2003, indicates that there is no significant potential for proliferation of Macroalgae on this beach.

Assessment of the potential for proliferation of marine phytoplankton: Not Applicable.

Proposed management measures for marine phytoplankton: Monitoring of the beach since 2003, indicates that there is no significant potential for proliferation of Marine Phytoplankton on this beach.

Additional Information:

Contact Details:

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Name of contact person during holidays: Daithi Flood, Assistant Engineer or Eithne Murphy, Executive Engineer, Parks

4 Bathing Water Status From Previous Sampling Years:

	2010	2011	2012	2013
Silverstrand Beach	Good	Sufficient	Good	Good

5 Contact Details:

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