

## EASTERN BEACH BATHING WATER PROFILE



Eastern Beach is Gibraltar's largest beach, stretching for several hundred metres along the East side of the isthmus separating Gibraltar from Spain. This sandy beach is situated to the North of Catalan Bay and receives the most hours of sunshine out of all the three beaches on the Eastside of Gibraltar. The surrounding land use is both residential and light-industrial.

During high and low tides the approximate distance to the water's edge can vary from 40–42 metres. The sandy beach slopes gently towards the water. For local tide information see:

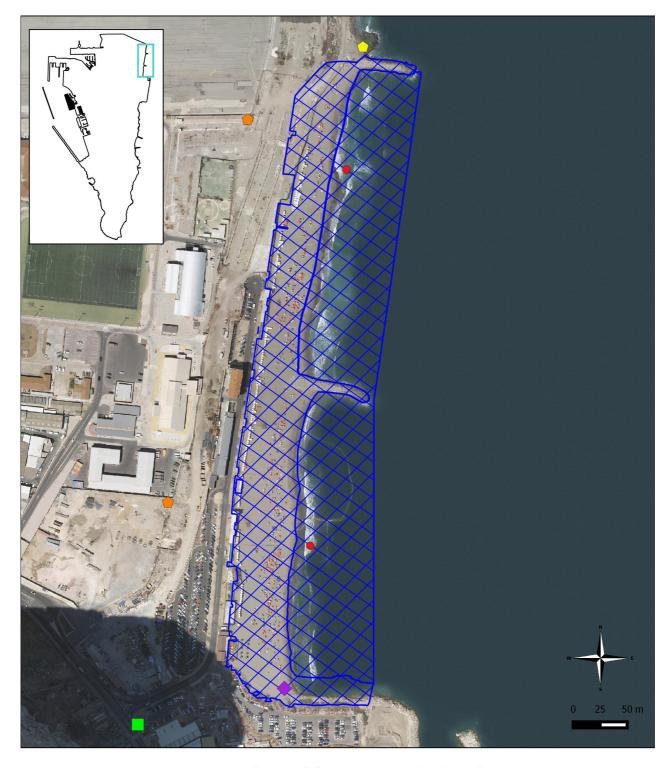
http://www.gibraltarport.com/tide-and-weather

Table 1. General description of Eastern Beach & monitoring point

NAME OF THE PARAMETER	
Bathing Water ID	UKGIB10
Bathing Water Name	Eastern Beach
Short Bathing Water Name	Eastern Beach
Name of the competent authority	Department the Environment & Climate
	Change
Contact information of the competent	Tel: (00350) 200 48450
authority	Email: info.environment@gibraltar.gov.gi
Bathing water profile last reviewed on	1st August 2016
Next review of Bathing water profile	As required.
Reasons for review	Directive requires bathing waters previously classified as 'excellent' to be reviewed only if the classification changes to 'poor', 'sufficient' or 'good'.
Beach publicly or privately operated	Publicly operated
Member state	United Kingdom
Province, Region, etc.	Gibraltar
Municipality	Gibraltar
Name of the river, lake, transitional water or coastal	Gibraltar
Location within member state	See Figure 1
Pair of coordinates of the monitoring	Long: 28° 95′55" Lat: 400° 31′08"
points	Long: 28° 95'21" Lat: 400° 27'59"
Frame of reference for the coordinates	WGS84

The chosen monitoring points at Eastern Beach are illustrated in Figure 1 below. The representative points are located in the centre of the north and south side of the beach; although bathers frequent the entirety of the length of the bathing area demarcated. Known sources of pollution could originate from the North or South of Eastern Beach making the chosen points the ideal monitoring locations.

Figure 1. Location of Eastern Beach, extent and bathing water monitoring point.



## **Eastern Beach Bathing Water & Catchment**

## Legend

- Bathing Water Monitoring Points
- Storm Drain Open Channel
- Storm Drain Soakaways
- Pumping Station
- Storm Drains
- Defined Beach Extent



Table 2. Physical and geographical characteristics of Eastern Beach.

NAME OF THE PARAMETER	
Description of the beach	<pre>     muddy     marshy     x sandy     rocky</pre>
Structure of the riparian Zone	<ul> <li>natural</li> <li>semi-natural</li> <li>modified</li> <li>other: Coastal shoreline reinforced with groynes. No vegetation.</li> </ul>
Length of the beach	Approx. 585 meters
Medium depth of the bathing water	2 meters
Maximum depth of the bathing water	6 meters
Bathrooms, showers, toilets	<ul><li>bathrooms</li><li>x showers (during bathing season)</li><li>x toilets (during bathing season)</li></ul>
Waste disposal	Waste collection and recycling facilities are available at the beach.
Admittance for dogs	Dogs are only permitted on the Northern side of the beach and outside of the bathing season.
Other activities than bathing	Fishing (restricted to certain times of the year and with a valid fishing license), snorkelling, surfing (restricted to certain times of the year) & canoeing.
Maximum daily number of bathers during high season and best weather conditions	5000

Table 3. Name and codes of the river basin district.

NAME OF THE PARAMETER	
River Basin District ID	UKGIB17
River Basin District Name	Gibraltar
River Basin District SUID	n/a
River Basin District SU Name	n/a
Water Body ID	UKGIB6903
Water Body Name	Gibraltar
National Water Unit ID	n/a
National Water Unit Name	n/a

In Gibraltar, the bathing season lasts six and half months from the 15<sup>th</sup> of April to the 31<sup>st</sup> of October although the greatest number of bathers occur during mid-June to mid-September.

Bathing water standards are set in the EC Directive 2006/7/EC. The bathing water monitoring programme is based on weekly samples taken throughout the bathing season. Eastern Beach has always met the mandatory values set by the Bathing Water Directives. Recent and historical results of the bathing water programme at Eastern beach are available online from the Gibraltar Environmental Agency website at:

http://www.environmental\_agency.gi/environmental\_monitoring.htm

In addition to the requirements of the revised Bathing Water Directive numerous quality elements are being used to assess the status of coastal waters in the immediate vicinity of Eastern Beach. These quality elements include physical, biological and chemical parameters in line with the requirements of the Water Framework Directive 2000/60/EC. A comprehensive overview and results of the monitoring carried out to date is available online from the Department of the Environment's website [https://www.gibraltar.gov.gi/new/water]. The coastal monitoring programme has been augmented to include the obligations of the Marine Strategy Framework Directive (2008/56/EC).

Identification and assessment of causes of pollution that might affect bathing waters

The coastal waters in the vicinity of storm water overflows can see changes in water quality during periods of heavy rainfall especially where these serve as combined sewer overflows. The resultant flows could have an effect on bathing water compliance predominantly due to faecal pollution. The climatic conditions in Gibraltar can be described as Mediterranean/subtropical and therefore periods of heavy rainfall are infrequent during the bathing season in Gibraltar.

The potential relevant pollution sources at, or near, Eastern Beach are highlighted in Figure 1. These are storm water outlets at beach level. There are no surface watercourses within close proximity of Eastern Beach. The principal risk is short-term faecal pollution following a period of intense rainfall during the bathing season. The effects of which would last no longer than 1-2 days after the period of rainfall.

It is important to note that Eastern Beach is located just south of the border with La Linea, Spain, where there exists a number of combined sewer overflows and a sewage treatment discharge within approximately 1km North of Eastern Beach that could cause transboundary impacts. Such short term pollution events would be highlighted by the bathing water monitoring programme.

Proliferation of cyanobacteria, macro-algae and/or other marine species

Macroalgae and phytoplankton are an integral part of the marine ecosystem. Excess populations can nevertheless result in a deterioration of bathing water quality especially in the case of phytoplankton blooms.

Ongoing monitoring suggests that Eastern beach is not subject to excess macroalgae or phytoplankton. Phytoplankton numbers do increase naturally during the spring and autumn but not in numbers large enough to be considered as a threat to bathing water quality.

There is a possibility of increased numbers of jellyfish in the water particularly during the summer months. This is a naturally occurring phenomenon. Although there are a few stinging species common to the Gibraltar, most are harmless and bathers are not allowed to swim when jellyfish numbers pose a risk to bathers.

## **About this document:**

This document was produced in August 2016. Any feedback or comments on the profile should be sent to <a href="mailto:info.environment@gibraltar.gov.gi">info.environment@gibraltar.gov.gi</a>