



Department of the Environment
and Climate Change
HM Government of Gibraltar

WESTERN BEACH BATHING WATER PROFILE



Western Beach is a sandy beach located in the North West part of Gibraltar on the verge of the border with Spain. Adjacent to the beach lies Gibraltar Airport and there is also a small military residential estate behind the beach.

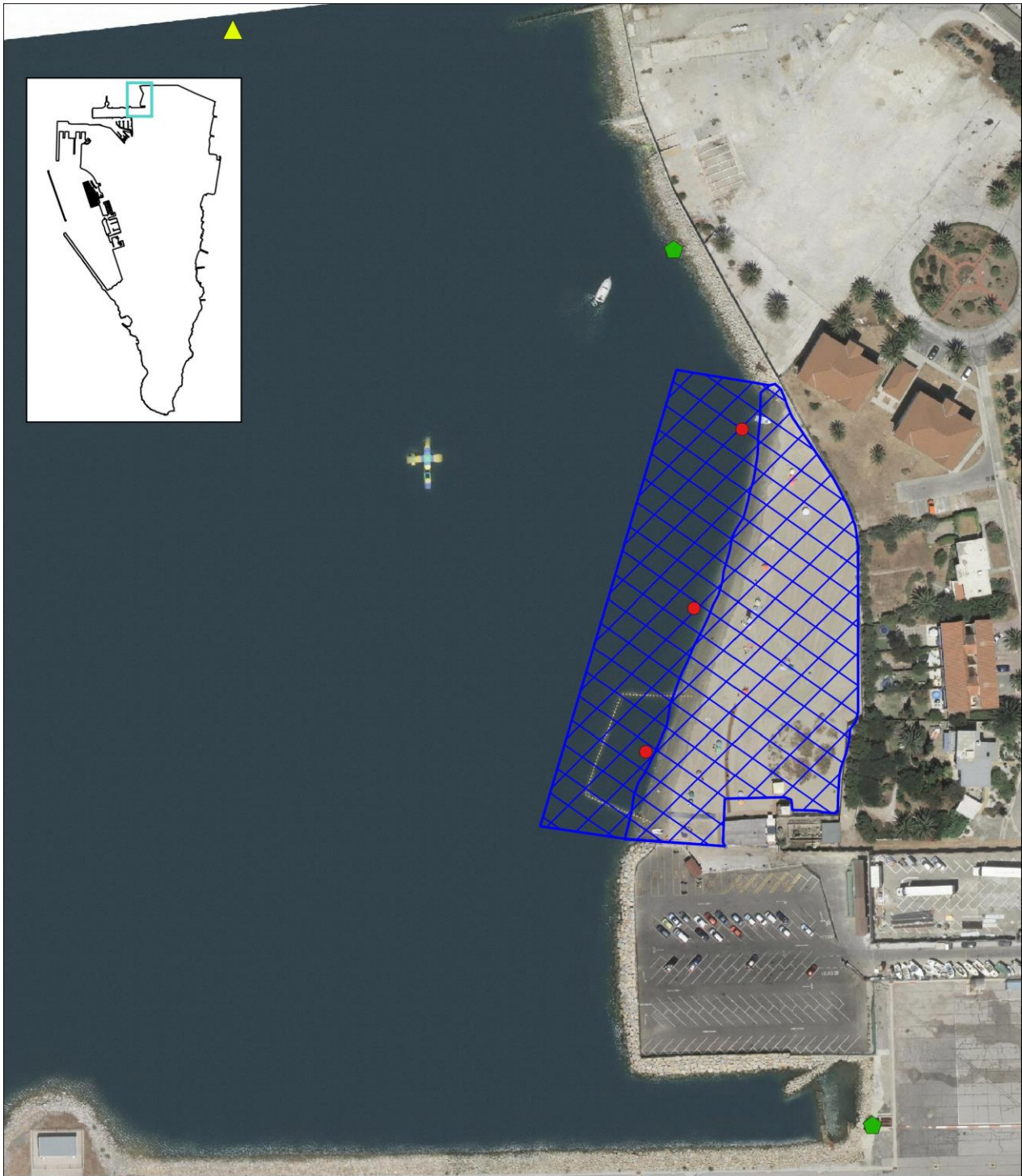
During high and low tides the approximate distance to the water's edge can vary from 40–42 metres. The sandy beach slopes gently towards the water. For local tide information see:
http://www.gibraltarport.com/tidal_gauge.cfm

Table 1. General description of Western Beach & monitoring point

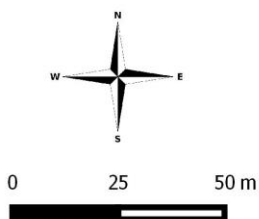
NAME OF THE PARAMETER	
Bathing Water ID	UKGIB60
Bathing Water Name	Western Beach
Short Bathing Water Name	Western Beach
Name of the competent authority	Department the Environment & Climate Change
Contact information of the competent authority	Tel: (00350) 200 48450 Email: info.environment@gibraltar.gov.gi
Bathing water profile last reviewed on	1st August 2016
Next review of Bathing water profile	1st August 2018
Reasons for review	Directive requires bathing water classified as poor to be reviewed every 2 years.
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 point	Long: 28 ° 84'59" Lat: 400 ° 35'06" Long: 28 ° 84'73" Lat: 400 ° 35'56" Long: 28 ° 84'45" Lat: 400 ° 34'61"
Frame of reference for the coordinates	WGS84

The chosen monitoring point at Western beach is illustrated in Figure 1. The representative point is located in the middle of the beach although bathers frequent the entirety of the length of the bathing area demarcated. Known sources of pollution originate from the North of Western beach making the chosen point the ideal monitoring location.

Figure 1. Western beach location, extent, bathing water monitoring point & catchment map.



Western Beach Bathing Water & Catchment Map



Legend

- Bathing Water Monitoring Points
- ◆ Storm Drain
- ▲ Combined Sewer Overflow
- ▣ Defined Beach Extent



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Table 2. Physical and geographical characteristics of Western Beach.

NAME OF THE PARAMETER	
Description of the beach	<input type="checkbox"/> muddy <input type="checkbox"/> marshy <input checked="" type="checkbox"/> sandy <input type="checkbox"/> rocky
Structure of the riparian Zone	<input type="checkbox"/> natural <input checked="" type="checkbox"/> semi-natural <input type="checkbox"/> modified
Length of the beach	Approx. 130 meters
Medium depth of the bathing water	2 meters
Maximum depth of the bathing water	6 meters
Bathrooms, showers, toilets	<input type="checkbox"/> bathrooms <input checked="" type="checkbox"/> <u>showers (during bathing season)</u> <input checked="" type="checkbox"/> <u>toilets (during bathing season)</u>
Waste disposal	Waste collection facilities are available at the beach.
Admittance for dogs	Dogs are not allowed on the beach.
Other activities than bathing	Windsurfing (restricted during certain times of the year except outside buoyed area) & sailing.
Maximum daily number of bathers during high season and best weather conditions	600

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

Historical data

In Gibraltar the bathing season lasts six and a half months, from the 15th of April to the 31st 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. Until recently, Western Beach had always met the mandatory values set by the Bathing Water Directives. Changes in the sewer and drainage infrastructure in Spain have resulted in the beach failing to meet the mandatory values. Recent and historical results of the bathing water programme at Western 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 Western 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 and Climate Change' 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, Western Beach are highlighted in Figure 1. There are two storm water drains discharging directly to the sea to the North and South of Western Beach. There is also a combined sewer overflow approximately 100m North of Western Beach in Spain discharging directly into Gibraltar waters. This overflow is continuously discharging untreated sewage and is believed not to be connected to the main trunk sewer in La Linea (Spain). There are no surface watercourses within close proximity of Western Beach.

The principal risk is faecal contamination from the combined sewer overflow in Spain discharging into Gibraltar waters. Pollution events (including short-term pollution events) are being highlighted by the bathing water monitoring programme and can be seen online from the Gibraltar Environmental Agency website [http://www.environmental-agency.gi/environmental_monitoring.htm]. Samples are being taken more frequently in this bathing area due to the severity of the contamination episodes. Should the existing situation remain, the closure of this bathing area will have to be considered.

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 Western 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 info.environment@gibraltar.gov.gi