

Godrevy and the Red River

What you need to know if you see discolouration

May 2015

For the last 5 years the bathing water quality at Gwithian Beach (Godrevy) has been rated as 'excellent'. This means the water has very low levels of harmful bacteria. We hope residents and visitors alike will once again enjoy this beautiful beach this summer. Occasionally the water here can become discoloured. We know this can be alarming so here is what you need to know if you see discolouration.

1. Discolouration in the river or sea doesn't necessarily indicate sewage

The Red River flows down to Gwithian Beach and into the sea. During periods of rainfall the river, and subsequently the sea, becomes discoloured by one or more of the following sources:

- surface water running-off roads and fields where the soil is exposed
- the abandoned mine at Dolcoath discharging water into the river, and/or
- local combined sewage overflows (CSOs) spilling diluted and screened sewage into the river

So diluted, screened sewage is just 1 of 3 possible causes of discolouration. In fact the Red River got its name because historically the local mines discharged their ore processing wastes into the river which turns the water brown or red.

2. CSOs spill during heavy rainfall to prevent sewage flooding in homes

When it rains the volume of water passing through the combined sewerage system increases dramatically and can exceed the capacity of the pipes. When this happens the combined sewage overflows (CSOs) at Tolvaddon and Reskadinnick Pumping Station take the excess sewage, diluted with rainwater, to the Red River. It is very rare that this causes environmental harm because the sewage is diluted by rain. Without these CSOs operating for short periods of time, sewage could burst out of manholes in the street or flood into homes and businesses during storms.

3. Bathing water quality at Gwithian Beach is 'excellent' despite discolouration

Last summer an intense storm caused 10mm of rain to fall per hour. The storm caused surface water run-off and water discharges from Dolcoath to turn the Red River and the sea brown, and triggered a local CSO to spill. But this didn't damage the consistently 'excellent' bathing water quality at Gwithian Beach.

We know this because between May and September we test the quality of the water here every week. Each time we sample the water at the same location, which is the point used by most bathers. We also sample the quality of the Red River for bacteria before it goes into sea.

4. CSO spills are effectively regulated by us and you can check for CSO spills too

We only allow South West Water's (SWW) CSOs at Tolvaddon and Reskadinnick Pumping Station to spill into the Red River when rainfall puts excessive pressure on our drainage system. We check that SWW is complying with these conditions using their monitoring data and our own investigations.

We will take urgent action to require SWW to make improvements if a CSO isn't operating correctly and causes a pollution incident during the bathing season. But this isn't currently the situation at this beach.

Anyone can check whether there is an increased risk to water quality from a local CSO by visiting South West Water's Beach Live system www.beachlive.co.uk/.

Beach Live also alerts the beach manager and local public health authority, Cornwall Council if a CSO is spilling. They will decide with the beach owner whether it is necessary to put up health warning signs to advise against bathing. The Environment Agency can't close beaches. We monitor bathing water quality and share this information with local authorities and the public to inform their decisions.