

# Bexhill Town Council Wild Domesday Project



## **Bexhill Wild Domesday Report on Sea Bathing**

### **Relevance**

This report is dated 19<sup>th</sup> June 2023 and will be updated during the year as more facts become known. The report is only relevant to the nine wards of the town but visitors and people living elsewhere might find it interesting.

### **Introduction**

#### **Concerns Over the Safety of Sea Bathing at Bexhill-on-Sea**

The town's drinking water is supplied by Southeast Water. The town's wastewater and sewage processing services are supplied by Southern Water in conjunction with Thames Water. These are private companies with shareholders.

Southern Water's website is here: <https://www.southernwater.co.uk/>

South East Water's website is here: <https://www.southeastwater.co.uk/>

For at least 100 years there have been concerns about sewage pollution in the town; there have also been many concerns in the last few years about pollution of sea water along our beaches and immediate sea area. Back in the post-war era of the 1950s and '60s the sea at places like Galley Hill and Bexhill Sea Front was frequently awash with poisonous bacteria, oil, dead seabirds, unprocessed faeces and used contraceptives. From personal memory, I can confirm that local families and visitors used to swim in this highly polluted water, thinking it 'normal.'

Gradually, as legislation demanded improvements, water companies made some changes, but even now the situation is unsatisfactory. It is salutary to learn how the current dual purpose outflow system was forced on the people of Bexhill by uncaring officials at government and local levels. The people of Bexhill were the first in Britain to protest about sewage in the sea.

#### **History of the Outflow System**

Much of the current Bexhill sewage system was installed in 1884 and there are newspaper articles of the time reporting that the town had a 'stench' about it. However, the most important development occurred in 1934, in which the people of Bexhill were essentially tricked

into accepting a floodwater overflow system right in the middle of their key swimming area and linked to the main sewer system.

This is how it happened as reported in the Daily Herald of Monday 20<sup>th</sup> August 1934.

Pioneering Bexhill citizens were said to be the very first people in Britain to protest about polluted swimming seawater. The newspaper explained that 'the whole question of sewage disposal around the coast of Britain is being raised in a striking fashion by the Bexhill, Cooden and District Protection Association (BCDPA). This is an organization specially formed with £3,000.00 capital (now worth £173,185.00) and an office in London to fight the new drain which it claims will have the effect of distributing sewage along the foreshore.'

The Herald goes on to explain that:

'**Never before** has this question, which affects the pleasure of millions of holidaymakers all round Britain been so raised.'

The BCDPA sent a letter to the Ministry of Health opposing the Bexhill Sewer Scheme, but the town's population were tricked because the public inquiry required before planning consent could be given was barely advertised, so no notice was given to ratepayers who lived along the Bexhill and Cooden sea front. Within this 'public' inquiry, assurances were given that the scheme was only for a stormwater overflow outfall and would **NOT** be connected to the sewer system – and therefore there would be **NO** discharge of sewage. But this was all lies.

Because the notice given of the public planning inquiry was so poor, only **ONE** ratepayer attended the inquiry, and that person 'raised many justified questions'.

However, as the Herald reports:

'The Bexhill Town Clerk said, 'You may ask but you won't get an answer. I am just about tired of your questions about this matter!'

The Herald's report continued with the statement that 'although the outfall was in the middle of a two-mile stretch of prime bathing water and next to the swimming areas for a large school for girls and a smaller school for boys, the Ministry of Health approved the scheme and the attempt by the BCDPA failed.'

Later, an unnamed Bexhill Council official admitted that the pipe **was** connected to the sewer system but would only carry raw sewage when heavy storms made this necessary. Due to this duplicity, this is the situation we find ourselves in today. In fact, as you will read below, there are now between eleven and fifteen pipes onto the beach! No-one is completely sure why.

## **Oil Pollution**

On top of raw sewage discharge, the town also suffers from oil pollution.

On Saturday 15<sup>th</sup> August 1925 the Bexhill-on-Sea Chronicle reported intense dissatisfaction with oil pollution from tankers. The oil companies themselves said that they agreed: 'not only is it polluting – but look at how much money we are losing through wastage into the sea.'

Throughout the 1920s and 1930s there were many reports of dead oiled seabirds washed ashore. Almost every year, this was complained about until some international regulations about oil in the sea were proposed in 1955. However, the situation did not improve because nations did not discipline their shipping companies and they continued to wash out their tanks in mid-Channel.

You can read here the report by the Birmingham Daily Post of 11<sup>th</sup> August 1967:

'Thousands of holidaymakers were treated for oil on their skin and clothes yesterday, as the oil slicks floating off the South Coast for three days washed on to beaches in Sussex. Throughout the day gangs of council workmen toiled with shovels and detergent to clear the mess left by the morning tide-24 hours after the Town Clerk of Eastbourne, Mr. F. H. Busby, claimed the oil reports had been grossly exaggerated.'

However, the newspaper reporter continues:

'At Bexhill, beach inspector Mr. John Cruickshank said: More than 3,000 holidaymakers were treated at a special decontamination centre for clothing and skin polluted by oil.' Councillor Chris Read, chairman of Bexhill Publicity Committee, described the oil pollution—believed to be from a tanker washing out in mid-Channel.

He said: 'Already this year we have paid out more than £1,000 (now £14,865.00) to clear our beaches. Now this little lot will cost us up to the £2,000 mark (now £29,730.00). It is quite wrong for us to be singled out to pay this money for other people's misdeeds, and I will call on the town council to ask the Ministry for a Government grant.'

At Hastings, cleansing stations were also set up along the sea front. and deputy Borough Engineer, Mr. C Cowlin, put the cost of clearing the beaches at several thousand pounds. At Eastbourne, oil narrowed the span of beach which could be used by sun-bathers. Hundreds of children had oil all over their bodies. and more than 200 people called at the pier first aid hut for help. The afternoon tide brought more oil along the coast but not as much as the previous tide. At Bexhill workmen tried spraying the oil with detergent as it lay on the water close in. A council official said: 'We will be on the beach at first light tomorrow to see what the next high tide has brought - in many places the oil lodged in pebbles and is likely to be dislodged over a period of days with each tide.'

## **The Future**

Having seen the troubles of the past, we now look to the future.

Sea Water quality is checked by the Environment Agency weekly from May to September. Therefore, anyone who wants to swim outside those times has no means of knowing the state of the sea's cleanliness along our shoreline. It may be that more sampling is necessary.

It is interesting to note that the very latest Environment Agency readings are in the **Excellent** bracket. In previous years the annual evaluation has merely been in the lowest category -

called 'Sufficient'. Indeed, Southern Water, who sample more frequently, has told our MP Huw Merriman that their recent readings are also in the 'Excellent category'. So, despite the occasional heavy downpour, we hope that things will continue to improve.

To learn about how the system works and what the latest readings are:

[https://environment.data.gov.uk/bwq/profiles/profile.html?\\_search=Bexhill&site=ukj2205-14200](https://environment.data.gov.uk/bwq/profiles/profile.html?_search=Bexhill&site=ukj2205-14200)

The fine analysis can be seen here and confirms what our MP says in his article below:

the statement from Southern Water describing the latest water quality as "excellent" is based on tests conducted since May this year. Southern Water and the Environment Agency share the same data.

The current tests are displayed here: <https://environment.data.gov.uk/bwq/profiles/data-samples.html?bw=ukj2205-14200#current>

The results of the tests show that they are within the threshold of "excellent": <https://environment.data.gov.uk/bwq/profiles/help-understanding-data.html>

Nevertheless, as I write this report there is a pollution incident ongoing caused by the intense rain of the last two days:

## **'2023 Bathing Water Profile for Bexhill**

### **East Sussex, England**

**19/06/2023 08:30: Advice against bathing: pollution risk warning'**

Probably because of the fundamental failure in 1934 detailed above, and lack of progress since, we have not yet found a way to allow flood water into the sea but prevent sewage from joining it.

### **Waters are Warmer - People Want to Swim –**

Today 19<sup>th</sup> June the European Space Agency gave a remarkable report via the BBC:

**'Some of the most intense marine heat increases on Earth have developed in seas around the UK and Ireland, the European Space Agency (Esa) says.**

Water temperatures are as much as 3 to 4C above the average for this time of year in some areas, according to analysis by Esa and the Met Office.

The sea is particularly warm off the UK's east coast from Durham to Aberdeen, and off north-west Ireland.

The Met Office says the reason is partly human-caused climate change.

But other, less-understood natural and man-made factors appear to be driving temperatures up further.'

The Esa data shows sea water around virtually the entire coastline of the British Isles is warmer than usual. The full BBC article with maps and graphs is here:

<https://www.bbc.co.uk/news/science-environment-65948544>

## **Safe Swimming**

As Project Manager of the Bexhill Wild Domesday, I have contacted the very helpful **Outdoor Swimming Society:**

[Wild Swim Groups: The UK List – Outdoor Swimming Society Outdoor Swimming Society](#)

They explained:

'Thank you for getting in touch with us. It's a complex landscape – the damage repeated treated and untreated sewage releases currently are having on our environment and on water quality is of concern to many in the swimming community. It is important to separate facts from scaremongering.'

Surfers Against Sewage have an app, Safer Seas, that you can consult to look at the status of releases in Bexhill. They also have information on their website including stats and case studies.

The Surfers Against Sewage website is here:

[Surfers Against Sewage - UK charity campaigning for the ocean \(sas.org.uk\)](http://sas.org.uk)

Many organisations are currently involved in discussion with the Environment Agency and local authorities about the situation. And local authorities who manage bathing areas along the coast put up signs to say don't swim after heavy rain.

The New Scientist produced an interesting article which blames a raft of long-term practices and engineering challenges. The Rivers' Trust is worth looking at too for opinions. The Women's Institute has picked up on the need for cleaner rivers as their point of action this year.

If you want the very latest thoughts about swimming in Bexhill's sea area, then you may contact:

## **BEXHILL SEAGALS**

Contact – Becki Read

Swim Times – Ad hoc, see Facebook

Facebook Social Media – [Bexhill Seagals](#)

Or: [Bexhill SeaGals | Facebook](#)

The Outdoor Swimming Society says finally:

'Our response to what's going on is to keep swimming and use your own judgement as to whether it's safe to swim - stopping swimming may be what polluting water companies and local authorities want and could have a more detrimental effect to people's health and wellbeing than the chance of getting sick.'

### **Policial Feedback – New Developments**

Our MP, Huw Merriman has recently commented in his newsletter:

<https://www.huwmerriman.org.uk/news/latest-water-test-results-mean-good-news-bexhill-bathing>

'Just over a week ago, I held one of my regular meetings with Southern Water for an update on their progress. They told me that their 'shadow' testing regime takes frequent water samples across 14 sites in Bexhill, including the Environment Agency's official testing point at the Egerton Park stream outflow. Coastal samples are prioritised, but inland and upstream water samples are also taken. The results are looking positive. All Southern Water samples taken in the week commencing 29 May were in the 'excellent' water quality category.

The Environment Agency's own regular water testing of Bexhill bathing waters since 5 May, also show 'excellent' water quality from 3 samples and are far better than the equivalent samples from the last two years.

The project to investigate pollution entering Egerton Park stream involves testing all entry points into it. Whilst no significant pollutants have yet been identified, some results have led to further investigation. The project will continue until the whole area has been mapped and analysed.

These latest test results show that Bexhill's bathing water quality is better than may have previously been thought and this is good news for the town. I hope these results will continue and will provide reassurance for those who will be making the most of the sea in these sunny days.'

However, very heavy rainfall can still result in CSO releases into the sea to prevent homes being flooded and it's important to be aware when this happens. The live CSO monitoring data on Southern Water's Beachbuoy webpage helps inform sea users of these events.

This site is here: [Beachbuoy \(southernwater.co.uk\)](http://Beachbuoy(southernwater.co.uk))

We have a lot of outflow pipes on Bexhill beach and it's not clear what role they play. Last year, I joined Southern Water, Environment Agency, Rother District Council and East Sussex County Council on Bexhill beach to look at the outflows. I asked the organisations to provide clear information about each pipe. Southern Water has since launched an



'Outfall Awareness' project. Once completed, it will clearly identify all 11 outfall pipes along Bexhill beach and better inform the public about what they do and what comes out of them.'

## **The Environment Agency Statement about Bexhill's Situation**

These notes are copied from their website to make it easy for those who want everything in one document:

### **Catchment description**

The natural drainage (hydrological) catchment surrounding the bathing water comprises approximately 700 hectares of the urban area of Bexhill. The upper catchment slopes steeply. Egerton Park Stream originates in Glenleigh Park and runs through urban Bexhill mainly culverted. The river drains into the sea through an outfall 140 metres west of the bathing water sampling point.

### **Pollution risk forecasts**

This bathing water is subject to short term pollution procedures. The Environment Agency makes a daily pollution risk forecast at this site based on the effects of rain, tide, wind, and seasonality on bathing water quality. These factors affect the levels of bacteria that get washed into the sea from livestock, sewage and urban drainage via rivers and streams and how they disperse. When these factors combine to make short term pollution likely we issue a pollution risk warning on this website and the beach manager will display a sign advising against bathing at the bathing water. After a short-term pollution event, levels of bacteria typically return to normal after a day or so but it's possible to have several warning days in a row. Details of the work to reduce the sources of bacteria in this bathing water are detailed in this profile. In 2022 20 pollution risk warnings were issued for this bathing water. All bathing waters have the potential to be affected by a pollution incident and if this occurs a pollution risk warning will be issued with associated advice against bathing on this website.

### **Investigations statement**

The Environment Agency investigated the surface water and sewer system in Bexhill in the late 1990s. As a consequence, storm overflows across the catchment were upgraded. A wrongly connected wastewater pipe entering Egerton Park stream in Wainwright Road was rectified prior to the 1999 bathing season. Joint surveys by Southern Water Services and the Environment Agency during 1999 demonstrated, however, that contamination persisted in the main culvert. Since then, investigations have focused on the catchment of Egerton Park Stream. The Environment Agency introduced a DNA tracing technique that helps us identify whether sources of faecal pollution are human or animal. Since 2009, this method has been used at sites across the catchment of Egerton Park Stream, enabling us to target further investigations and identify appropriate courses of corrective action.

## **Visible pollution**

Environment Agency samplers make observations of litter present on the beach at every visit; this includes assessments of sewage debris, litter, and tar. At Bexhill for the four-year (2019-2022) assessment period where data is available, sewage debris was not noted at this site. Litter was assessed as being sufficient to be objectionable for 2% of visits, with 35% of visits noting the presence of litter. Tarry residue was not noted at this site.

## **Pollution management**

It is the Environment Agency role to drive improvement of water quality at bathing waters that are at risk of failing higher standards. It is natural for water to run off the land to the sea. Water quality at a bathing water is dependent upon the type and area of land (the catchment) draining to the water and the activities undertaken in that catchment.

## **Streams and rivers**

Egerton Park Stream drains onto the beach 140 metres west of the bathing water sampling point. The stream runs through an urban catchment, which includes a number of storm overflows. Inputs into the river occur when heavy rainfall overwhelms the sewerage system and causes diluted sewage to overflow.

## **Working with water companies**

### **History**

Fifteen storm overflows in the Bexhill catchment were upgraded between 1998 and 2000. Treatment was installed on the long sea outfalls at Combe Haven and Bulverhythe and at Hastings sewage treatment works prior to the 2003 bathing season. Under the programme of works for Southern Water (from 2020 to 2022) investigations within the catchment were carried out. This will help to identify where bathing water improvements may be needed in the future.

### **Sewage treatment works outfalls**

Discharges from sewage treatment works have improved substantially in England since the 1980s.

Bexhill and Hastings sewage treatment works at Galley Hill was upgraded to treatment in 2003. The sewage treatment works discharges through the twin long sea outfalls at Bulverhythe and Combe Haven.

### **Emergency or storm overflows**

The majority of sewers in England are "combined sewers" and carry both sewage and surface water from roofs and drains. A storm overflow operates during heavy rainfall when the sewerage system becomes overwhelmed by the amount of surface water. The overflow



prevents sewage from backing up pipes and flooding properties and gardens. An emergency overflow will only operate infrequently, for example due to pump failure or blockage in the sewerage system.

There are 15 storm overflows in the Bexhill area. Five storm overflows are within the immediate catchment of Egerton Park Stream, which drains onto the beach 140 metres west of the bathing water sampling point. Egerton Road storm overflow is the one closest to the beach. Polegrove and Richmond Road storm overflows discharge via the Egerton Park Lake outfall. Discharges into the river occur when heavy rainfall overwhelms the sewerage system and causes diluted sewage to overflow. Southern Water carried out an investigation of the performance of their CSOs between 2005 and 2007. All CSOs met operational overflow requirements designed not to affect bathing water compliance. There are another two CSOs that discharge onto the beach 2 km either side of the bathing water. One is located off Hartfield Road in the west, the other one at the foot of Galley Hill to the east. Discharges occur when heavy rainfall overwhelms the sewerage system. This can result in a lower standard of water quality after rainfall.

### **Working with local authorities**

In 2006, the Rother District Council requested the Environment Agency to move the bathing water sampling point. At the beginning of the 2008 bathing water season, the sampling point was relocated 360 metres towards the east.

Heavy rain falling on pavements and roads often flows into surface water drains or highway drains, ending up in local rivers and ultimately the sea. The quality of bathing water may be adversely affected as a result of such events.

### **Misconnections**

Modern sewerage systems have two separate systems, one takes foul sewage to sewage treatment, the other takes rainwater runoff through surface water drains to rivers, lakes, and the sea. Misconnections occur when wastewater pipes are plumbed into surface water drains instead of the foul water sewerage system. This can give rise to pollution when the wastewater is discharged directly to the environment through the surface water drain. For example, a washing machine or toilet may be incorrectly plumbed so that it discharges to the surface drain rather than the foul sewage drain. Using the results from Southern Water's sewer network investigations, the Environment Agency, Rother District Council and Southern Water have been identifying and rectifying misconnections within the Bexhill catchment. Further work is on-going, investigating pollution inputs into the lower parts of the catchment.

### **Algae**

Seaweed (macroalgae) and phytoplankton (microscopic algae) are a natural part of the marine and freshwater environment. Below we note whether these have been recorded in quantities sufficient to be a nuisance.

## **Seaweed (macroalgae)**

For the four-year (2019-2022) assessment period where data is available, seaweed (macroalgae) was not assessed as being sufficient to be objectionable but was observed as being present on 17% of visits. This bathing water does not have a history of large amounts of seaweed.

## **Phytoplankton (microscopic algae)**

For the four-year (2019-2022) assessment period where data is available, phytoplankton (microscopic algae) was not assessed as being sufficient to be objectionable but was observed as being present on 3% of visits. Microscopic algae (phytoplankton) increase in number at certain times of the year. This process is known as a phytoplankton bloom. Blooms of phytoplankton can result in the water appearing discoloured or a foam forming on the water. The risks to human health from contact, ingestion or inhalation with marine algae that currently occur in UK coastal waters are considered to be low. However, some individuals may be more sensitive and display some reactions. A common marine alga found in UK coastal waters is *Phaeocystis*, which is often mistaken for sewage as it forms foam and a brown scum, but it is non-toxic.

## **Conclusion**

This is the first report on this subject, and it will be amended as new information is found. Thank you for reading it. We still have a long way to go to ensure that sea water bathing is never at risk of pollution.

Kind regards

David EP Dennis

Bexhill Wild Domesday Project Manager

19<sup>th</sup> June 2023