SANDGATE PARISH COUNCIL - Sea Water Testing Report | March 2024

Councillor Peter Hickman

SPC Environment Committee

BLUF (Bottom Line Up Front):

Sandgate Parish Council (SPC) carried out sea water testing on twelve occasions between October 2023 and January 2024 to enable cross checking of data provided by the Environment Agency (EA) and Southern Water (SW). The results are produced below with recommendations for next steps/aspirations for consideration by SPC Councillors.

Introduction:

It was agreed by Sandgate Parish Council in September 2023 that they would carry out a series of sea water tests off Sandgate Beach to clarify the accuracy and therefore reliability of the data currently being published by the EA. To this end the council contacted Simplex Health, an established independent testing laboratory to provide sea water testing kits.

The order to Simplex Health was placed on 21st September 2023 for x12 kits to cover a 3 month testing period.

The period was from:

Thurs 5/10/23 (First Test)

Thurs 11/01/24 (Last Test)

* There was a two week break in the testing regime over the Christmas period due to the unavailability of DPD Courier Services.

Background:

It came to the Council's attention that the sea water testing carried out by the EA was taking place in an area one mile to the west (Battery Point Seabrook (see ANNEX A) of the main Sandgate bathing beach at Granville Parade (see ANNEX B). The EA test point at Seabrook is 50 metres to the west of a sewage outfall pipe. The prevailing current in this area runs west to east and therefore testing presumably fails to pick up pollutants which are dissipated in an easterly direction towards Sandgate and Folkestone. Unsurprisingly testing at this point provides some excellent results.

However, evidence from local sea users (swimmers, rowers and anglers) suggested there were high levels of sewage being discharged from an outfall pipe located at the western end of Granville Parade Sandgate, especially during periods of high rainfall. A testing regime was proposed to give the Parish Council a snapshot of the water quality on what SPC consider to be the Sandgate bathing beach.

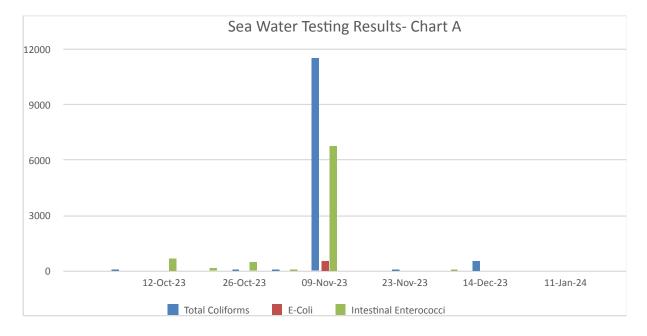
Sea Water Testing:

SPC carried out 12 of the scheduled 12 tests.

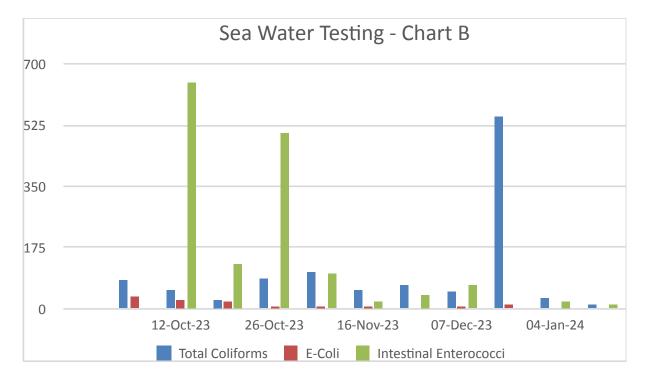
The initial test was a 4 in 1: Coliform/E.coli, Enterococci, PH Conductivity (Lab Test) and the subsequent tests were Bacteria: Coliform/E.coli, Enterococci (Lab Test)

From the tests carried out and data from Surfers Against Sewage, the Environment Committee Officer and the Parish Clerk have been able to deduce that poor results generally occur during

heavy rain and stormy conditions with far better results recorded during dryer, calmer conditions. This was not unexpected.



Sea Water Testing Results :



The Second chart has had the November 9th 2023 result removed to give better context to the other results.

The table below from Simplex Health gives context to the above results and shows levels of water borne pollutants and their classifications.

Parameter	Value Maximum
Total Coliforms (cfu/100ml)	low (no further details provided)
Escherichia Coli (E.coli) (cfu/100ml)	excellent: <500, good: <1000, sufficient: <900, poor (fail): >900
Intestinal enterococci (cfu/100ml)	excellent: <200, good: <400, sufficient: <330, poor (fail): >330
рН	6 to 9
Blue-green algae (cells/ml)*	If visible bloom, count should be carried out; low: <20,000; moderate: >20,000 – <100,000; high: >100,000
Conductivity	The purer the water the lower the conductivity
Appearance	No abnormal change in colour
Odour	None
Transparency	>1 metre
Surfactants	No lasting foam
Mineral Oils	No surface film or odour

Further Information can be found at:

ANNEX A: EA Sandgate Beach Testing Point - Seabrook

ANNEX B: Sandgate - Granville Parade Outfall Map

ANNEX C: Water Testing Results EA.

ANNEX D: Southern Water Beachbuoy Discharge Results - Sandgate

Conclusions:

Because the testing was programmed rather than reactive, it missed some declared Southern Water discharges.

The testing did show high levels of contaminates on one occasion after heavy rain (Nov 9th). This was not unexpected and proved that Granville Parade outfall pipe is active.

Generally the quality of the sea water under normal weather conditions is good and on occasion was excellent.

Because Southern Water can decide whether a spillage is significant or not it is not possible to capture this activity by programmed testing. See ANNEX D for official discharge information.

The EA official verdict on the quality of their prescribed Sandgate Beach area (Excellent for the last 4 years) cannot be attributed to the Sandgate Bathing Beach because of the testing site and the geographical distance between the two.

Recommendations:

a.) If SPC choose to carry out further testing then it would be preferable to purchase a test kit that can be used in a reactive manner.

b.) How do we mitigate the risk to sea users in the short to medium term?

We have limited data from testing, but some excellent data from Surfers Against Sewage (SAS) showing that EA testing fails to capture the local spillages at Granville Parade. As a Parish Council we should issue advice to sea users on best practice so they may enjoy the sea in a safe manner.

- 1. Use caution when going into the sea after heavy rain.
- 2. Keep your head above water. Do not let water get into your mouth or nose.
- 3. Shower as soon as possible after swimming in the sea
- 4. Use the SAS App for up-to-date information on the current quality of the sea water.

c.) SPC should reach out to other coastal parishes and district councils to explore best practice during this period. We know this will be for an extended period, water companies have until 2050 to ensure their infrastructure is fit for purpose.

d.) The scope of this report is not to suggest solutions, however, simple steps like extending the outfall pipes further out to sea may help keep sewage spillage away from bathing areas and beaches. For example, the outlet pipe from the Hythe sewage treatment works extends 4km out to sea.

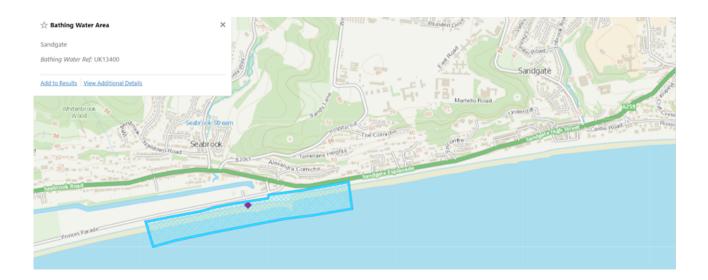
Summary:

The sea water testing regime undertaken by SPC was in direct response to the rise in the number of sewage discharges being experienced by many district and parish councils across the country. Whilst the general condition of the sea water in our parish is excellent we must remain vigilant as the water authorities only have to declare those discharges that *they consider significant*. The EA when reporting water quality have the power to remove any spikes in their data and consistently return results that ignore obvious discharges. All sea users should be encouraged to use the SAS App. HMG recognise SAS as an authority for monitoring the quality of the water in our coastal waters, lakes and rivers and SPC should adopt their monitoring as an accurate and unbiased source of data.

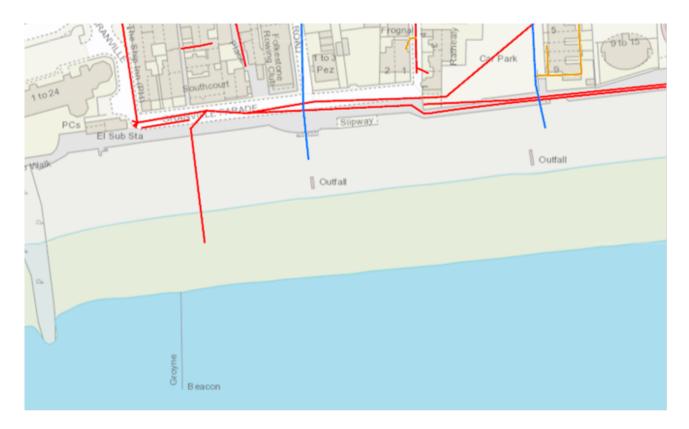
Councillor Peter Hickman Environmental Committee Sandgate Parish Council

8 March 2024

ANNEX A: SPC Water Testing Report/Hickman Dated : 8/3/24



ANNEX B: SPC Water Testing Report/Hickman Dated : 8/3/24

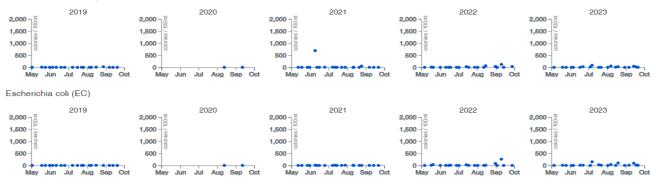


ANNEX C: SPC Water Testing Report/Hickman Dated : 8/3/24

Water quality sample results

• See the <u>help page</u> for additional information on interpreting these charts.

Intestinal Enterococci (IE)



ANNEX D: SPC Water Testing Report/Hickman Dated : 8/3/24

Southern Water Declared Discharges for Granville Parade Sandgate can be viewed here:

https://www.southernwater.co.uk/water-for-life/beachbuoy/releasehistory?siteId=12568