Southern Water update: Dover District Council – Overview and Scrutiny Committee

16 December 2024



What is Southern Water's role?

- We recognise the key role we have in trying to improve bathing water quality. We are a key custodian alongside the Environment Agency, Internal Drainage Board and Highways authorities, with local authorities responsible for public health.
- It's vital we work with local partners to tackle these issues together, and we work closely with the Environment Agency and partners to improve water quality.
- Work to improve bathing water quality has been defined in our Improvement Plan Strategy, which prioritises key locations for targeted work. This includes Deal Castle.





What can impact bathing water quality?

- There are a variety of issues which have the potential to impact water quality. For us, these include:
- Leaking assets
- Blockages
- Illegal connections
- Storm overflow releases.
- Other sources of pollution outside of our control include:
- Road, farming and industrial surface water run-off
- Waste from other water and beach users
- Seabirds also have an impact.





Task Force evolution





Deal Pathfinder

- Deal was chosen as one of our six Pathfinder areas and you can find out more here – <u>Pathfinder: Deal, Kent</u>
- However, important to note that the focus of the Deal Pathfinder was flooding, **not** bathing water quality
- Albert Road had suffered from chronic flooding for a number of years. The Task Force redirected surface water from our foul sewer to our surface water sewer to reduce pressure on the road during heavy rainfall.
- By separating the surface water and foul sewage, this reduced the pressure on our foul sewer network and did not overwhelm Golf Road WPS with surface water which it should not be treating.
- The work completed also included improvements at Golf Road WPS to help the site deal with heavy rain and reduce the risk of flooding.
- The combination of these action has reduced the risk of flooding on Albert Road.





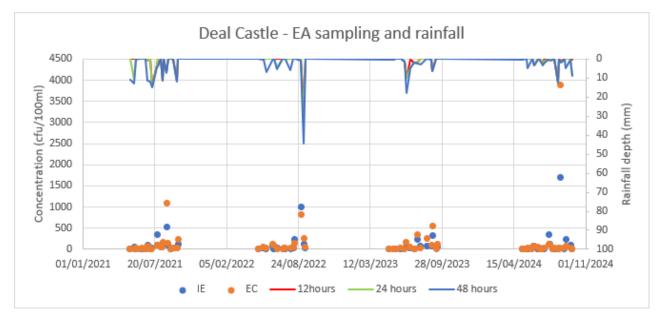
Bathing Water quality at Deal Castle

- Deal Castle bathing water classification recently declined to 'Poor', following Environment Agency's sample results taken from 2021 through to 2024.
- Unfortunately, there are no definitive answers to explain high sample results. No high samples correspond with Combined Sewer Overflow (CSO) releases.
- Our Golf Road (Deal) outfall does not release more than 10 times per year on average, therefore already achieving the Government's target.
- The last CSO release from Golf Road outfall was 2 October 2021.
- During the summer, the Environment Agency advised they increased testing at Deal Castle, but did not link any issue with water quality there back to Southern Water.





Environment Agency sampling / rainfall



- No samples were correlated with the operation of storm overflows
- Correlation analyses shows no relationship between concentrations and rainfall depth
- Very high sample result from 23 August 2024, the cause remains unknown



Investigations in Deal

- Tacking potential issues together is the only way we will improve bathing water and we will work with Dover District Council, Kent County Council and the EA to identify any potentially impacting factors.
- We're doing a wide range of different work in the area to help improve water quality, including additional water sampling from various locations, CCTV analysis of our sewers and private sewers and tackling illegal connections.
- We're also supporting Dover District Council with investigations at Deal Pier which may be impacting bathing water quality





Deal Castle improvement plan investigations

Deal Castle is the focus of a bathing water improvement plan, and our work so far includes:

Property checks:

A number of properties checked to confirm they were connected to mains drainage.

Beach walkover recorded observations at 17 locations along the coastline. The areas were selected based on location of assets, historic issues and noticeable landmarks.

No evidence of issues that could impact water quality were noted.

Surface water inspections:

Manhole covers lifted to visually check for evidence of contamination or strong detergent or foul odours.

34 Surface water manholes checked and a manhole located in Trinity Place was found to contain grey staining.

Further investigations have found three misconnected properties.

Caging Surveys:

Four cages installed strategically around the Deal Castle catchment to monitor the flow passing through the surface water network.

The areas were selected based on location of assets, historic issues and noticeable landmarks.

No evidence of household waste found and no evidence of issues that could impact water quality.



Summary of Deal Castle findings so far and next steps

- Three Illegally Connected properties were found, and all properties are now correctly connected. One property required enforcement action from Dover DC.
- Deal Castle bathing water has been selected for an in-depth investigation starting in 2025.
- Activities will include desktop studies, asset checks caging, CCTV survey, sampling and coastal/urban drainage modelling
- A key part of this work will include collaborative working with partner organisations
- These studies will be carried out over two years and reported to the Environment Agency by May 2027.



What we are doing now – Deal Pier investigations

- Ongoing investigations to test the integrity of the Pier drainage.
- As part of this work, we're introducing smoke testing into the drainage which will show if any joints are displaced, which may be causing leaks.
- Deal Pier is Dover District Council's responsibility.
 Collaboration is key and we are supporting.
- SWS contractors are carrying out the work and SWS are funding the initial investigation.
- Findings TBC







