

Community action in an evolving ecosystem

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Silt, Sewage, and
Communities along
the Water of Leith by
The Shore





The Forth Tidal Lock changed the ecology of the river basins....



EFFECTS OF RIVER IMPOUNDMENT

- Basins are no longer tidal.
- Debris, manmade and natural, is no longer able to escape.
- Strategically placed booms prevent debris from entering docks.
- *Water in the basins flows slowly and captures silt.*





SILT RESPONSIBILITIES

Forth Ports Authority were responsible for 'closing' the port in 1969.

Edinburgh Council must have been consulted before the port was enclosed - *were the consequences anticipated?*

SEPA is responsible for water quality and flood risk.

Water of Leith 2000 Ltd/Bluefield 1502:

- Bought the basins from FPA 20+ years ago.
- Own the land under the water known as the 'solum'.
- Charge their tenants for 'maintenance of water cleanliness'; deny any responsibility for rubbish or silt removal.



SILT LEVEL AT SANDPORT BRIDGE 1910

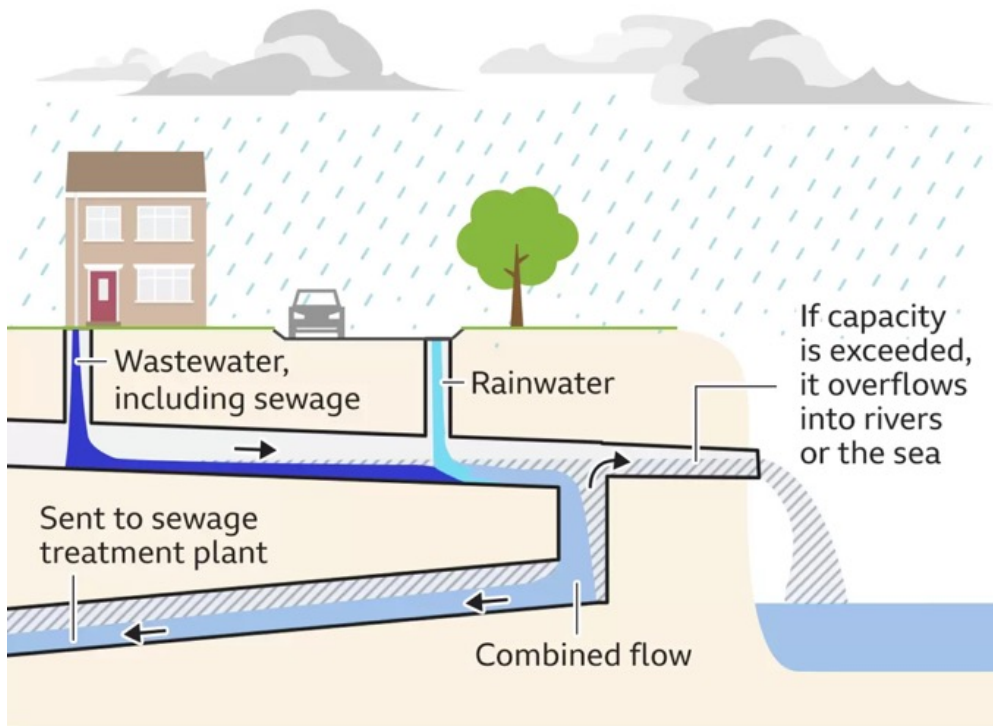


SILT LEVEL AT SANDPORT BRIDGE 2023



Combined Sewage Overflows

How combined sewer systems work



Source: Environment Agency



- Sixty-five are located along the entire Water of Leith.
- Eight are located in the vicinity of The Shore.
- If silt is dredged...

Fishermen fear further shellfish die-off

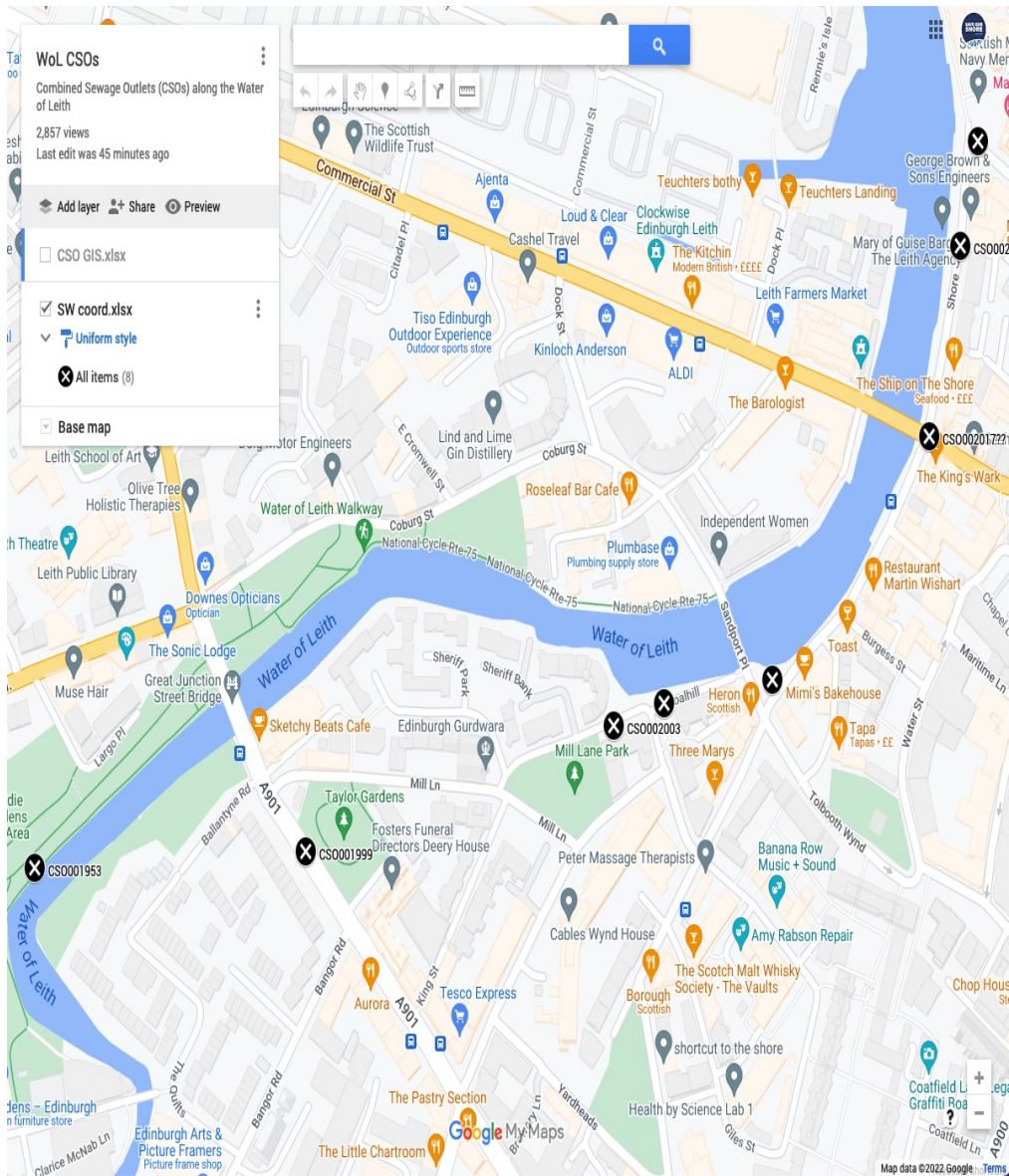
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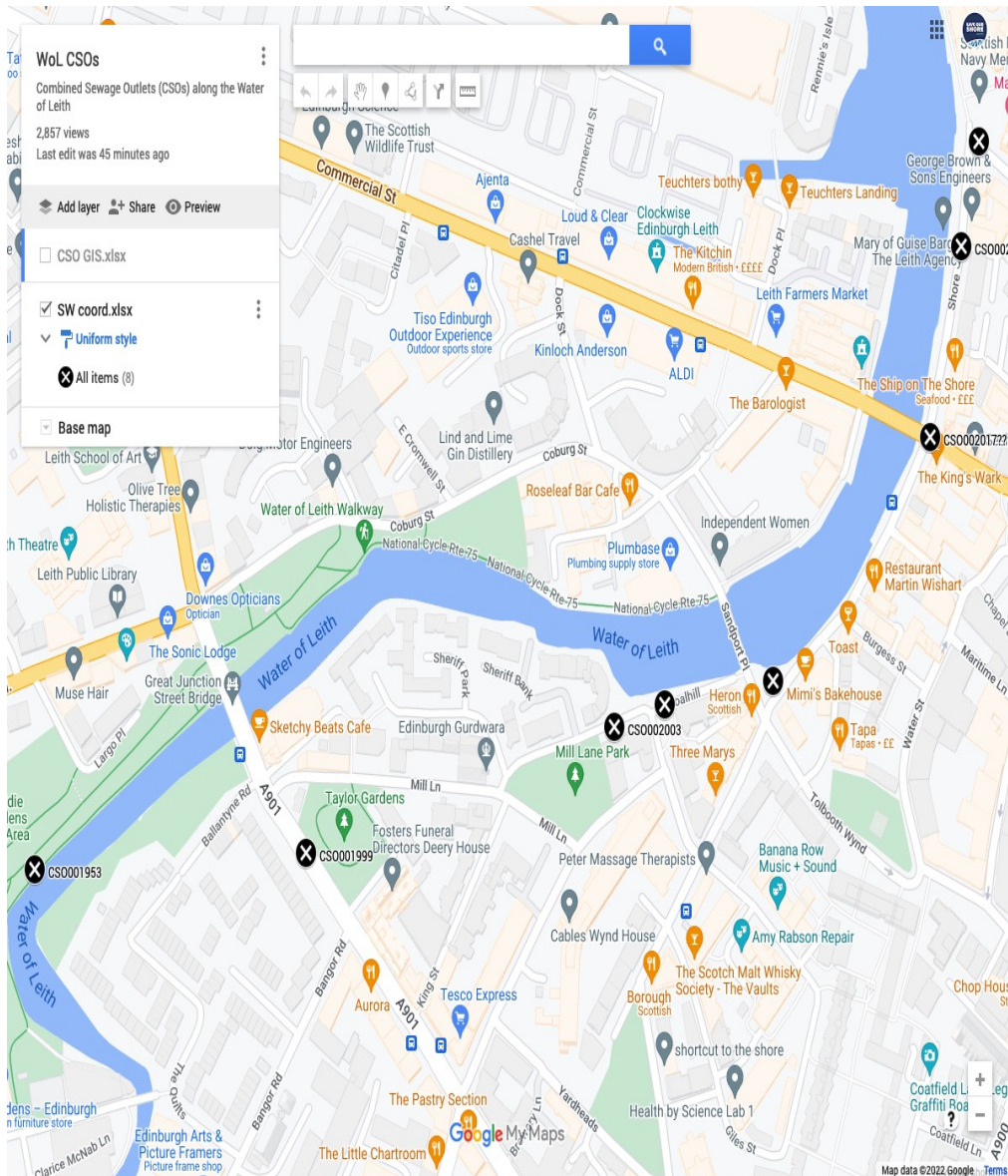
Dead crustaceans have washed up at several spots along the North East and North Yorkshire coast

Fishermen who blame dredging for a shellfish die-off along the North East coast fear more sediment will soon be dumped at sea, causing further damage.

Thousands of crabs and lobsters have washed up across Teesside and North Yorkshire since 2021.



- Eight CSOs discharge waste by or near The Shore.
- Scottish Water, a publicly owned body accountable to the Scottish Government and regulated by SEPA, manages CSOs.
- Impossible to retrieve information from SEPA and Scottish Water about what is being released into the water, when, and in what volumes.



- **Q1** - Given the river here is choked by silt, and there is little flow out to sea, are sewage and resultant bacteria trapped in the silt?
- **Q2** - What risk does sewage release and possible retention in silt pose to an urban population with one of the highest densities in Scotland?
- **Q3** - How will this risk increase with new residential and commercial development?
- **Q4** – What risks are river users facing, including kayakers, people fishing, and maintenance staff working on barges and the water?
- **Q5** - Is there a long-term risk to people visiting the riverside restaurants, bars, shops, and hotels that are concentrated along The Shore?



WHAT WE ARE FINDING OUT – Scottish Government

- The Scottish Govt response has been vague. *“SEPA expects all Unsatisfactory CSOs to be resolved over time, unless it is disproportionate to do so, considering all possible short and long-term solutions”*.
- Human health impacts are only monitored and assessed in relation to areas protected for human health, such as Bathing Waters and Shellfish Water Protected Areas.
- Focuses investment on tackling the CSOs most likely causing actual environmental impacts rather than permanent monitoring.



WHAT WE ARE FINDING OUT – Scottish Government

- *But if CSOs are not being monitored, how can those “most likely to be causing actual environmental impacts” be identified?*



WHAT WE ARE FINDING OUT – SEPA

- SEPA's current water quality classification indicates that the lower Water of Leith has Good status for monitored water chemistry parameters but Moderate status for diatoms and hydrology flows.
- Sewer spills can potentially impact on the chemistry and ecology of a river.
- SEPA advises SOSLeith members to report any environmental pollution events that they observe in the Water of Leith to SEPA. These should include any sewage fungus, significant sewage-related debris and if they observe sewer overflows or drains spilling following dry weather.



WHAT WE ARE FINDING OUT – SEPA

- *Misses the central point, which is that sewage is being discharged into the building silt and slowed water caused by Forth Ports tidal gate, affecting the environment of one of the most densely populated neighbourhoods in Scotland.*
- *Misses the point that in the vicinity of The Shore, discharges are released into the silt and are invisible from the surface.*



WHAT WE ARE FINDING OUT – SW

- As far as SW is concerned, CSOs are here to stay, as the financial and carbon cost of re-doing the Victorian infrastructure to eliminate them is too great. It plans repairs and other initiatives, such as diverting surface water away from sewage systems.
- *“These unsatisfactory intermittent discharges (UIDs), along with another 15 confirmed UIDs in the Water of Leith, have been promoted into our investment planning process. We are currently investigating these assets for feasibility and costs, and anticipate that this will be complete by March 2024.”*
- The eight CSOs along The Shore are now a top priority for action, but... **“important to note that depending on the complexity of options this work will take time before any decision is made to carry out any physical work (if feasible)”**.



SOSLEITH RECOMMENDS:

- Coordinate with the community.
- Treat the problem of sewage discharge into the silt as a unique context.
- Provide clear information on how much sewage is being released into the Water of Leith, how often, and with what implications for human and broader environmental health.
- Monitoring should be routine on all discharges. Without it, we have no evidence on which to discuss solutions.
- Produce a clear action plan for mitigating CSO spillage into the Water of Leith, with clear timelines and Key Performance Indicators.
- Let people know how much sewage, and associated risk, to tolerate in the meantime.



RESOURCE LINKS

- [Environmental Rights Centre for Scotland](https://www.ercs.scot) - <https://www.ercs.scot>
- [Forth Rivers Trust](https://forthriverstrust.org) - <https://forthriverstrust.org>
- [The Water of Leith Conservation Trust](https://www.waterofleith.org.uk) - <https://www.waterofleith.org.uk>
- [SOSLeith CSO paper](#)
- [SOSLeith blog on the ERCS website](#)
- [Herald article on the call for sewage monitoring as river branded a health hazard](#)