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Coastal Communities Network
Sewage Pollution Case Studies

Coastal Communities Network
Scotland



CCN Sewage Pollution Case Studies - CCN member community groups' experiences with sewage pollution in their local area

Contact details

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CLP Nature Action



Who are we?

Across our 3 villages of **Charlestown, Limekilns and Pattiesmuir (CLP) in West Fife on the Firth of Forth**, we collaborate with others to conserve, enhance and restore nature, create opportunities for local villagers to take action for nature through education, volunteer, training, flexible green jobs and promoting sustainability and climate adaptation.

CLP Nature Action was established in 2018 in response to pollution from our local river, sewage-related debris, nurdles, and poor water quality which has discouraged community use of our beaches.

We believe we can achieve more through collaboration with our: School Community Garden, Seven Beach Cleaning Programme, Lyne Burn River Pollution Monitoring, Limekilns Natural Seagrass Conservation and Restoration, Rain Ready CLP Community Engagement Project, Tackling Invasives, Biodiversity Enhancement including hedgerows, holding developers to account regarding NPF4/BEAP's locally, advocacy, events.

Our community garden project provides every local primary pupil with hands-on outdoor learning experiences linked to the Curriculum for Excellence - biodiversity, ecosystems, sustainability, conservation, natural resources, weather, climate, erosion. We believe headteachers should include the wastewater treatment journey and 3P message as part of their curriculum delivery. Despite great efforts by Scottish Water, of the 1000's of primary school children we have met, mostly around Fife over the last 10 years, only 5% knew their toilet water goes to a wastewater treatment centre, the rest believed it went straight to the sea. The majority thought the council or plumbers were in charge of water or did not know.

We have created 4 flexible part time jobs for local villagers since becoming a registered charity in 2024 as well as having over 200 volunteers who support us in different ways.

Winner of Nature of Scotland Community Initiative Award 2024.

CLP Nature Action

Rain Ready CLP Project

Rain Ready CLP Project - Case Study

The project aims to develop a **flood resilient community** that can adapt to climate change and **reduce the sewage related pollution** on our beaches and in our local waterways for the benefit of people and nature.

The sewage system in our area is mostly made up of combined sewers conveying both wastewater from properties and surface water to our local treatment sites. Increasingly intense and sudden rainfall is overwhelming our drainage infrastructure leading to the untreated discharge of raw sewage, wipes and other sanitary items into the Firth of Forth and Lyne Burn and flooding in our streets. There is also an absence of data on numerous septic tanks discharging into the Forth from our villages.

We are collaborating with Scottish Water to improve the infrastructure throughout our villages to help resolve these issues. However the solution will also require village households to do their bit including installing rain gardens, water butts, ponds, disconnecting downpipes. These also provide a source of backup water and spaces for nature.

Our Project Officers have had a huge response from households since our project launch in September 2026.

We are working with Fife Council planning and others to install rain planters visible on key community village buildings including the school, nursery, church and local pub with messaging, and also focusing measures in household areas where flooding is happening.

We hope this project could be replicated around the Firth of Forth. Our pollution comes from all around the Forth where others are also dealing with flooding.

Our river is also affected by SRD overflows and other run-off pollution. Our monitoring has triggered SEPA retests in most months due to low invertebrate abundance and diversity, yet **SEPA lacks the resources to attend to check our data. Why not train volunteers living in communities to SEPA's required standard, creating a network of SEPA volunteer community monitors?**

East Haven Together

Pollution and Testing

East Haven, on the Angus coast, was named in the Sunday Times in 2003 as having one of the most polluted beaches in Scotland. Since then, the community have tried many times to obtain water testing. They have obtained a community-led beach award every year since 2016, and upload regular survey data.





Barriers

The requirement to evidence 150 people bathing in the sea at one time prohibits East Haven from achieving the threshold for designated bathing water. Therefore, the level of bacterial pollution in East Haven remains unknown. Scottish Ministers have discretion to approve designations based on community evidence but the process and criteria isn't clear.

Sewage Related Debris

Volunteers spend hours picking up extensive amounts of SRD that litters the beaches between Monifieth and East Haven.

Septic Tanks and the Eroding Coastline

In 1990, a new wastewater treatment plant was constructed at Hatton just beyond East Haven, however East Haven was not connected due to lack of funds. An appeal by EHT was unsuccessful, leaving half the village on a single pump septic tank station, and the other half on individual septic tanks with outfall pipes which terminate in the dunes. As the coast erodes, there is a risk that the outfall pipes will become exposed and pollute the marine environment.

East Haven Together

Policy Alignment and Risk Assessment

Erosion on the Rise

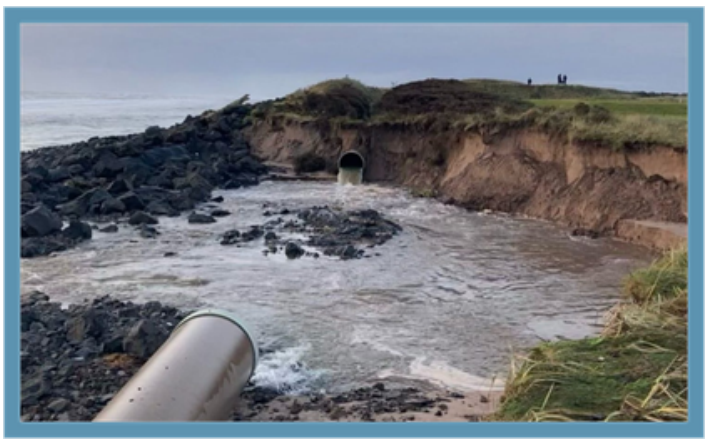
Coastal erosion in Scotland has risen by 39% since the 1970s. Scottish Water have identified 215 wastewater assets and 19km of sewers that will be at risk from coastal erosion by 2050.

Major Incidents

Storms and a high spring tide in October 2023 resulted in a 30 metre stretch of sewage pipe being washed away from the coastal edge in Carnoustie despite protection by gabion boulders. There is now a presumption against any hard defences unless to protect essential infrastructure as it is known that they can increase erosion elsewhere.

Future Proof Plans?

Communities are concerned that Scottish Water is spending £1m moving a major sewage pipe closer to the edge of the dunes in Monifieth. The pipe which currently runs at the rear of Tayview Caravan park undoubtedly requires replacing and upgrading to prevent leaks. To reroute it through the caravan park would seriously disrupt the business and increase costs significantly. However, moving it to the edge of the coastal dunes will make it extremely vulnerable to coastal impacts and require costly hard defences that need replaced frequently. This is in conflict with not only Scottish Water's own risk and sustainability plans but wider coastal adaptation and resilience policies.



We need to ensure polices are aligned and that any investment in our water infrastructure improves future resilience.

Coastal Communities Network Scotland

Edinburgh Shoreline



Sewage Pollution Impacts

There are ongoing concerns about sewage discharges, sewage-related litter and poor water quality around the Firth of Forth. For local people, this creates uncertainty about whether it is safe to swim or use the water, while pollution also puts pressure on wildlife and important coastal and marine habitats.

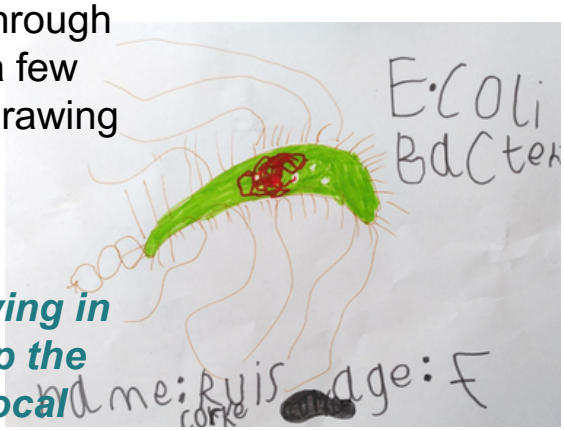
Tackling the Issue

Through the Firth Aid project, we are helping communities better understand, record and raise concerns about coastal pollution.

We developed a timeline recording issues, reports and actions in the Firth of Forth over the last 25 years. This helps communities see the bigger picture and demonstrate that concerns may be part of a longer-term pattern rather than isolated incidents.

Scottish Water presented at our final Shifting Baselines event to share local improvements already planned. **Our aim is to work with, rather than against, regulators and key industry leaders.**

We also run art projects where local people share views on water quality and sewage, amongst other topics. Some strong messages have come through art that are more emotionally charged than a few facts on a page. Here is an example with a drawing of an e-coli by 7 year old Ruis.



It is alarming to know that there is a high probability of getting very sick when playing in the water at my local beach. We must stop the discharge of untreated sewage into our local water ways, so children can play safely in nature without becoming ill.

Edinburgh Shoreline



Barriers

Communication

One of the biggest challenges is knowing who to contact, what questions to ask and how to get clear information about what is happening. Information and responsibilities can feel fragmented across different organisations.

Stigma

There can be reluctance to talk openly about sewage pollution, particularly in popular coastal and tourist areas. Residents and local businesses may worry that publicising problems will create a negative perception of their area or affect tourism. This is understandable, but it can make it harder for communities to raise concerns and push for improvements.



Asks

We want cleaner coastal waters, better information and greater transparency about pollution and sewage discharges. We also want communities to feel confident raising concerns and to know that the evidence they collect will be listened to and acted upon.

Communities need accessible information, clear points of contact and practical tools to help them record evidence and ask the right questions. There also needs to be better communication and collaboration between communities, Scottish Water, regulators, local authorities and other organisations, backed by monitoring and investment in infrastructure.

Loch Leven Sea Savers



A citizen science group encouraging access to the marine environment of Loch Leven and the wider marine world of Lochaber.

Sewage Pollution Issues

We have found variable but sometimes high levels of faecal indicator bacteria across Loch Leven, the River Coe, River Leven/Kinlochleven and Cuil Bay.

In 2026, several sites recorded elevated E. coli and exceeded SEPA's single-sample indicator for poor water quality (above 500 E. coli CFU/100 ml).

This is concerning because the waters are widely used for swimming, kayaking, diving, paddleboarding and more.

Community Action

- Three years (2024 to 2026) of community sewage sampling, testing E. coli and Enterococcus at sites across the River Coe, Loch Leven, Kinlochleven and, from 2026, Cuil Bay. All results are published openly, including interactive maps.
- A full year (May 2025 to May 2026) of weekly sampling analysed by an accredited lab, funded by Surfers Against Sewage. This used the same method as the regulator.
- A successful campaign for Bathing Water designation of the Ballachulish Peninsula, granted in March 2026.
- Working with community groups in Duror and Kentallen to set up regular monitoring at Cuil Bay.



Loch Leven Sea Savers

Barrriers to Action

- **Pollution is episodic** making it difficult to identify persistent problems or their sources.
- **Statutory monitoring by SEPA stops** when the bathing season ends after summer, but people swim, kayak, dive and paddleboard here all year.
- **Absent owners and unaware visitors.** Some holiday homes and holiday lets have owners who are rarely on site, so septic tanks can go unchecked and unmanaged. Holidaymakers staying in these properties are often unaware the house is on a septic tank at all, and are rarely told what should not go down the toilet or sink.
- **Awareness of responsibilities and consequences.** Some septic tank owners don't realise they are legally responsible for maintaining their system and keeping it regularly emptied and in good working order.
- There is **no map of septic tank overflow pipes**. Our data shows where contamination is occurring. However, there is no public record of where private overflow pipes discharge, so we cannot trace a problem back to its source. Without that information, neither the regulators nor we can act on what the evidence shows.

Asks

- **Consistent year-round monitoring** - extend Bathing Water Status all year round so SEPA tests the water every week.
- **Targeted investigations** to fix the issues where pollution repeatedly occurs.
- If a designated bathing site gets a poor designation then it should not have its designation revoked. Scottish Water and SEPA should work together to help resolve water quality issues.
- Close the loophole allowing private septic tanks to empty into overspill pipes with limited regulation.
- Real-time public sewage alerts.
- **More monitoring** of sewage overflows.
- **Better collaboration** between community groups, SEPA and Scottish Water



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Our three-year dataset shows that community monitoring can provide valuable evidence and identify potential pollution hotspots.

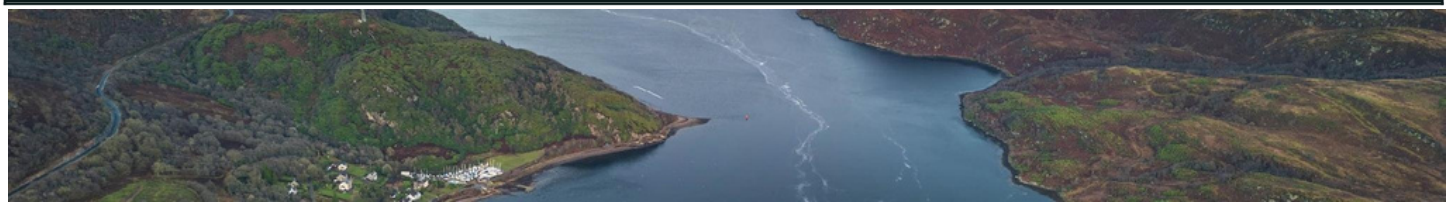
We want community evidence to be taken seriously and translated into practical action to protect people and our waterways.

THE KYLES COASTAL COMMUNITY

CCN WATER QUALITY ROUND TABLE
CASE STUDY

SEWAGE IN THE KYLES OF BUTE

What we've seen, what we've tried, and what needs to change



Kyles of Bute from the air ·Photo: Paul Paterson

WHAT WE'VE SEEN

SEWAGE ON OUR SHORES

2,392 sewage spills at the local treatment works, 2019–2023

- **Raw sewage on the beach and at sea**
- **Homes discharging directly onto the shore**
- **Frequent discharges from the sewage works**

WHAT WE'VE DONE

MAKING SOME NOISE

- **Campaigning:** Dare to Dip on STV News, a paddle-out with Surfers Against Sewage and MSPs, a school-led event in Kames Hall, the Rural Parliament and Ocean film nights with ABCAN.
- **Gathering evidence:** water testing funded by Surfers Against Sewage, and a pilot project with university researchers and local householders.
- **Holding to account:** raising the problem with SEPA, Scottish Water and our MSPs.
- **Working together:** Rural Water Agenda, the CCN water quality group, the CuSS coalition, TRACC, Our Seas and the Open Seas network.

BARRIERS

WHAT'S IN THE WAY

- **A Victorian system** now carrying modern chemicals, plastics and medicines.
- **Patched-up mains,** with a long history of bodged local repairs.
- **No room on the shore:** homes sit at the water's edge, with no space for soakaways or conventionalsystems.
- **Nobody owns it:** no government body seems to be taking responsibility.

WHERE WE ARE

THE KYLES OF BUTE

Argyll, on Scotland's west coast: a narrow sea channel wrapping round the north of Bute and up into Loch Riddon.



NATIONAL SCENIC AREA . SSSI . CLYDE BIODIVERSITY HOTSPOT

Local people swim, paddle, dive, row and sail here. Dolphins, porpoises, seals, otters and gannets live here. Every discharge lands in the middle of all of it.

WHAT WE WANT

STOP THE SEWAGE

- **Help for every home:** government support to connect to an effective mains system,or to install small treatment units that are fit for purpose.
- **Drainage that copes:** a robust system for rainwater run-off.
- **Waste as a resource:** funding to explore turning sewage into heat and fertiliser.
- **Research that continues** with our university partners.

WHAT NEEDS TO BE IN PLACE

THERE IS NO 'AWAY'

Our waste is a resource, and it's time we treated it like one.

1 **A change in attitude:** seeing human waste as a resource again, and backing innovative systems.

2 **Tighnabruaich as a pilot:** funding to trial solutions fit for the whole of Scotland, that people want to buy into.

3 **A team to map it out:** experts, local organisations and residents finding the best solutions for the whole Kyles.

kylescoastalcommunity.org
FacebookandInstagram:TheKylesCoastal Community

CARING FOR THE KYLES OF BUTE

Photography: Paul Paterson (cover)