BRIEFING FOR THE FIRST MINISTER

MEETING WITH SCOTTISH WATER

7 June 2023

Key message	As the owner of Scottish Water, you will meet its leaders and discuss the approach to reducing sewage spills in Scotland
What	Meeting
Why	During FMQs on 27 April you committed to personally raising the matter of sewage spills with Scottish Water
Who	Dame Susan Rice, Chair of Scottish Water Alex Plant, Chief Executive of Scottish Water [redacted], Director [redacted] Cabinet Secretary for Net Zero and Just Transition
Where	FM's Office, St Andrew's House
When	7 June 2023, 11:45 – 12:30
Likely themes	Background of Scottish Water, including investment and funding Combined sewage overflows, sewage spills and Scottish Water's Improving Urban Waters Routemap Adapting to climate change
Media	N/A
Supporting officials	Kersti Berge, Director of Energy and Climate Change Jon Rathjen, Deputy Director for Water Policy and DECC Operations
Attached documents	**Annex A:** Background of the Water Industry and Scottish Water **Annex B:** Note from Cab Sec to FM on sewage spills and bathing water quality **Annex C:** Biographies of Scottish Water attendees

Agenda and Summary

Agenda

1. **Introductions**
    - You may wish to invite Scottish Water attendees to introduce themselves and offer some background on their roles.
    - Alex Plant began his role as CEO of Scottish Water on 1 June 2023.
2. **Background of Scottish Water** (see Annex A)
    - Scottish Water is Scotland's provider of public drinking water and sewerage services. It is publicly owned and priorities for investment are set by Ministers.
    - Invite Scottish Water to outline investment priorities and key responsibilities.
3. **Combined sewage overflows, sewage spills and Scottish Water's Improving Urban Waters Routemap** (see Annex B)
    - Invite Scottish Water to explain sewerage operations in Scotland, key challenges and their progress in delivering the Improving Urban Waters Routemap.
4. **Adapting to climate change** (see Annex B)
    - Invite Scottish Water and Officials to discuss the key challenges they're facing due to climate change and how Scotland needs to adapt.

Reason for meeting

- During FMQs on 27 April, following a question by Alex-Cole Hamilton (MSP for Edinburgh Western, Lib Dems), you committed to personally raising the matter of sewage spills with Scottish Water.
- Sewage spills are a topical issue across the UK. A number of MSPs (Lib Dem and Labour) have submitted PQs and correspondence raising: sewage spills in general; monitoring of CSOs; environmental water quality; and bathing waters.

Expectations / desired outcomes

- You will discuss Scotland's approach to handling sewage spills now and in the future, raise any questions or concerns you have with Scottish Water directly, and be able to reassure Parliament and the public that this matter is being handled accordingly.

SG engagement with Scottish Water

- The Cabinet Secretary for Net Zero & Just Transition meeting with the new Chief Executive of Scottish Water for an introductory session – 6 June.

Sensitivities

- There are no sensitivities. This is a meeting with a public body to discuss its performance. There is a good story to tell. The quality of Scotland's water bodies is on an improving trend reflecting a collaborative regulatory approach leading to prioritised investment.

Key messages

- Publicly owned Scottish Water has already invested £686 million since 2010 in action to improve Scotland's water environment.
- This has contributed to SEPA's most recent classification results showing 66% of Scotland's water bodies in good ecological condition or better (compared to England's just 16%).
- We are not complacent, with aims now in place to ensure that 81% of Scotland's water bodies achieve a 'good' or better classification by 2027.
- This will be aided by Scottish Water's new Improving Urban Waters Route Map which commits a further £345-470 million during 2021-27 on activities, including solutions for high priority CSOs and monitoring.

Briefing

Annex A: Background of the Water Industry and Scottish Water

Overview of Water Industry

The Scottish Water Industry consists of one wholesale provider (Scottish Water), retail providers, economic and quality regulators, consumer advocacy and activities to support a wider economic development agenda. Numerous jobs are supported through this industry, including around 4,200 directly within Scottish Water and a further 5,000 in the construction industry and wider supply chain.

Scottish Water – Key facts and figures

Scottish Water is the UK's fourth largest provider of water and wastewater services. It supplies roughly 97% of Scotland's population with drinking water and removes wastewater from 93% of the population. It had a turnover in 2021-22 of £1.7 billion.

Scottish Water owns and maintains 30,400 miles of water pipes, 231 water treatment works, 33,300 miles of sewers and 1,834 wastewater treatment works. These are managed so as to ensure that that drinking water supplied to customers and wastewater discharged to the environment meet strict legislative standards.

Household charges are collected by Councils together with Council Tax. Charges reflect the Council Tax bandings and any discounts applied. The average household charge for 2023-24 is expected to be £411. Overall charge increases for households are capped at CPI+2% for the 2021-27 period.

Scottish Water has two subsidiaries:

- Scottish Water Business Stream, which provides billing and customer services to the non-domestic sector, with a revenue of £629m in 2021-22, and;
- Scottish Water Horizons, which provides 'non-core' services such as septic tanks emptying, developer services and energy projects, with a revenue of £50m in 2021-22.

Ministers' role

As a public corporation, Scottish Water is accountable to Parliament through Scottish Ministers. Ministers are required to appoint the Board, approve Delivery/Business Plans, agree pay remits, and generally oversee and support the corporation. A governance framework sets out how it approaches this task.

Ministers do not set customer charges but establish the policy context within which charges are determined by the Water Industry Commission for Scotland (WICS). Ministers' role in this area is provided in the Water Industry (Scotland) Act 2002. These include the requirements to set the length of regulatory periods (i.e. the period over which the WICS determines charges), set out charging policies and direct Scottish

Water as to the improvements it must make. The charging policies and the Investment Directions for the 2021-27 period were published on 7 December 2020.

WICS has the formal duty to determine customer charges in the light of the policies and budgets made available by Ministers.

Budget

The Government is committed to lending up to £1.03 billion to Scottish Water in the 2021-27 period to support the £4.5 billion investment programme.

The Budget Act allows Scottish Water to draw down £170 million in 2023-24. The profile of lending for the remainder of the period will be determined in the light of the progress of the investment programme and the cash position of Scottish Water. The annual budget setting process for the Scottish Government provides the context for this issue to be addressed.

Scottish Water pays over £100 million annually of interest on loans issued to them by the Government. This is income in the Government resource budget and is used to fund other pressures.

Annex B: Note from Cab Sec to FM on sewage spills and bathing water quality

15 May 2023

Sewage spills and bathing water quality

First Minister,

Following the points raised by Alex Cole-Hamilton during FMQs on Thursday 27th April in relation to sewage spills, you may find the following note useful in setting out the context of the issue, and highlighting action that is being taken. Further to your commitment to take up the matter personally with Scottish Water a briefing meeting is being arranged which I propose to also attend.

Background

Sewage spillages from combined sewer overflows (CSOs) is a current hot topic in the media, and while spillages are not a new issue, climate change and increasing urbanisation has contributed to the increasing frequency of spills. A number of MSPs (Lib Dem and Labour) have submitted PQs and correspondence raising: Sewage spills in general; Monitoring of CSOs; Environmental water quality; and Bathing waters. The issue is technical and complicated and misinformation does creep into the debate.

Despite the complexity, it is overall the case that Scotland enjoys high water quality. SEPA's most recent classification results show that 66% of Scotland's water bodies are now in good ecological condition or better (compared to England's just 16%). Indeed there is a much stronger picture when this headline figure is disaggregated into separate assessments of water quality (87%), water resources (90%), physical condition (90%) and fish migration (88%).

It is also the case that (i) a great deal of work has already been done to improve Scotland's sewer infrastructure over many years, backed by hundreds of millions of pounds of Scottish Water investment and (ii) that plans for the next phase of improvements have been published. All of this means that, while Scotland enjoys generally high levels of water quality, we are not complacent and that our publicly-owned water company is driving ambitious improvements under the regulation of our independent environment agency.

What is a CSO?

CSOs are an integral part of most of the sewer networks in Scotland and across the UK. Scotland's sewerage system is designed to accept sewage, industrial wastewater and surface water/run-off drainage. In the event of very heavy rainfall it is designed to spill dilute sewage to the environment to ensure that sewers don't back up and flood homes, businesses, streets and sewage works.

With increasing areas of impermeable surfaces (also known as urban creep) and the impact of climate change (increasing frequency and intensity of these types of rainfall events), CSOs are spilling more frequently. This is exacerbated by blockages in the network due to inappropriately-flushed items e.g. types of wet wipes, hygiene products etc. and other detritus that finds its way into the network.

Unless screens are fitted to CSOs, dilute sewage and any rubbish (also known as sewage related debris) is also discharged to the environment. The visibility of sewage debris as a result of such spills has attracted public interest, which grew due to "stay local" COVID restrictions, as well as the rise in popularity of wild swimming and the activities of pressure groups such as Surfers Against Sewage. There has been increased scrutiny on Scottish Water's pace of investment and progress to deliver improvements.

How is water quality protected?

A framework derived from European Directives (Water Framework Directive) is the basis for assessing and protecting the water environment.

SEPA licenses Scottish Water's discharges of sewage specifying the water quality standards to be met, and requirements concerning the recording and reporting of pollution events. There are approximately 4,000 CSOs in Scotland. To date, SEPA has focused its regulatory effort on addressing those sewer overflows which were causing the worst environmental impacts. This has led to the upgrading of over 250 unsatisfactory sewer overflows over the past decade.

What actions is SEPA taking?

SEPA has a responsibility to protect and improve Scotland's environment. For the water environment, we have committed, through the statutory framework, that all water bodies achieve 'good' ecological status by 2027.

Our objectives for the water industry regulatory period 2021-27 and the associated work programme to reduce pollution from all sources including the sewerage network, aims to ensure that 81% of Scotland's water bodies achieve a 'good' or better classification by 2027 and continue to improve as natural conditions recover beyond that date.

What actions is Scottish Water taking?

Scottish Water has published its Improving Urban Waters Routemap outlining how it will continue to invest to improve Scotland's water environment. Scottish Water has already invested £686 million since 2010 and this routemap commits to a further £345-470 million during 2021-27.

The first annual Routemap update was published in December 2022 highlighting:

- 54 projects have been initiated to develop solutions and support delivery to all high priority CSO discharges by 2027.

- Priority locations have been identified for the 1,000 spill monitors, with installation programmed over 2023 and 2024
- Spill data which is reported to SEPA has already been published on Scottish Water's website.

CSO Monitoring

Rather than permanent monitoring, which is the common approach for water companies in England, Scottish Water carried out a comprehensive Scotland-wide environmental study programme to assess and model the impacts of its assets on water quality during the 2015 to 2021 investment period costing **£40m.** These computer models can now allow Scottish Water to understand when CSOs will spill, under what rainfall conditions and the impact those spills will have on the environment.

Opposition MSPs, including Alex Cole-Hamilton, have pushed for all CSOs to be monitored in Scotland, as is the case in England. However, because sophisticated modelling has been developed for many large urban areas, this is not necessary. Instead, targeted monitoring is being put in place to support the information already obtained from the models and to support operational performance. We are very supportive of this evidence based and proportionate approach but are also investing on widening monitoring. In its Improving Urban Waters Routemap Scottish Water has committed to install 1,000 new spill monitors **by the end of 2024** supported by an investment of **£70m**. Scottish Water has now identified locations and installation is programmed over 2023 and 2024; we understand the first phase rollout is scheduled to begin this summer, date tbc.

Bathing Waters

At FMQs on 27th April Alex Cole-Hamilton raised concerns that designated 'bathing waters' have been impacted by sewage spills, with specific reference particularly to Peterhead and St Andrews. Regular monitoring of bathing beaches' water quality takes place throughout the bathing season; Peterhead, St Andrews (East Sands) and St Andrews (West Sands) were all classed as excellent in 2022. The CSO at Peterhead (which was the main focus of Mr Cole-Hamilton's comments) does not discharge into Peterhead Lido bathing waters. The most recent classification for all bathing waters is in the table below:

Classification	**2022**
Excellent	38
Good	35
Sufficient	12
Poor	2
Total	87

That means 98% of our bathing waters have met the necessary sufficient or better standards and more than ever are reaching 'excellent' status.

Can sewage spills be eliminated entirely?

Eliminating sewage spills entirely is not practical. It would require the replacement and upsizing of almost the entire 50,000km of our combined sewer network at considerable capital (est. at £13 billion) and carbon cost. Additionally, the pace of climate change may mean that even a dual system of separate wastewater and surface water sewers soon becomes overwhelmed rendering investment ineffective.

[redacted]

Conclusion

I should be pleased to provide further detail on any of the issues mentioned above. As noted, this is a complex and technical matter. However, I think the generality can be well summed up in:

- Publicly owned Scottish Water has already invested £686 million since 2010 in action to improve Scotland's water environment.
- This has contributed to SEPA's most recent classification results showing 66% of Scotland's water bodies in good ecological condition or better (compared to England's just 16%).
- But we are not complacent, with aims now in place to ensure that 81% of Scotland's water bodies achieve a 'good' or better classification by 2027.
- And this will be aided by Scottish Water's new Improving Urban Waters Route Map which commits a further £345-470 million during 2021-27 on activities including solutions for high priority CSOs and monitoring.

Màiri McAllan
Cabinet Secretary for Net-zero and Just Transition

Annex C: Biographies of Scottish Water attendees

Alex Plant **Chief Executive of Scottish Water** 	Alex became Chief Executive of Scottish Water on 1 June, joining from Anglian Water, where he was Director of Strategy & Regulation. Previously he worked as Director of Regulation at Royal Mail, Executive Director for Economy, Transport & Environment at Cambridgeshire County Council, and Chief Executive of Cambridgeshire Horizons. Earlier in his career he worked at HM Treasury on productivity, competition and regulation policy, and at the Civil Aviation Authority as Head of Economic Policy & International Aviation.
Dame Susan Rice DBE **Chair of Scottish Water** 	Dame Susan Rice DBE was appointed Chair of Scottish Water on 1 June 2015. She is also Chair of the Scottish Fiscal Commission, Senior Independent Director of J Sainsbury Plc and Non-Executive Director of C Hoare & Co, the North American Income Trust and Banking Standards Board. She is also the Chair of Business Stream and the President of Scottish Council for Development and Industry.
[redacted], **Director** [redacted],	[redacted]

From: [redacted]
To: Cabinet Secretary for Net Zero & Just Transition
Cc: Director of Environment & Forestry; Deputy Director Environmental Quality and Resilience; [redacted]; [redacted]; Rathjen J (Jon); [redacted]
Subject: Press sewage spill article briefing
Date: 31 May 2023 14:16:57
Attachments: image001.png
Sewage Spillages (3).docx

Please find below for Ms McAllan's attention a short brief addressing recent articles in the press about sewage spills. Also attached, our current sewage spillages FMQ which was updated yesterday.

Kind regards,

[redacted]

[redacted] | Water Environment | Environmental Quality and Resilience Division
Environment and Forestry Directorate | Scottish Government

Tel: [redacted] | Email: [redacted]@gov.scot

Ms McAllan should note yesterday's Daily Record article Scottish ministers worst-hit by sewage dumping nightmare in their constituencies revealed - Daily Record, "*First Minister Humza Yousaf topped the 'revolting' list with his Pollok constituency facing 8.3million cubic metres of sewage discharged into waterways last year*" after the Scottish Liberal Democrats compiled the list from published Scottish Water data. Also covered in the Daily Express (Scotland) yesterday.

It also lists Ms McAllan in the table from the article, below.

[redacted]

[redacted]

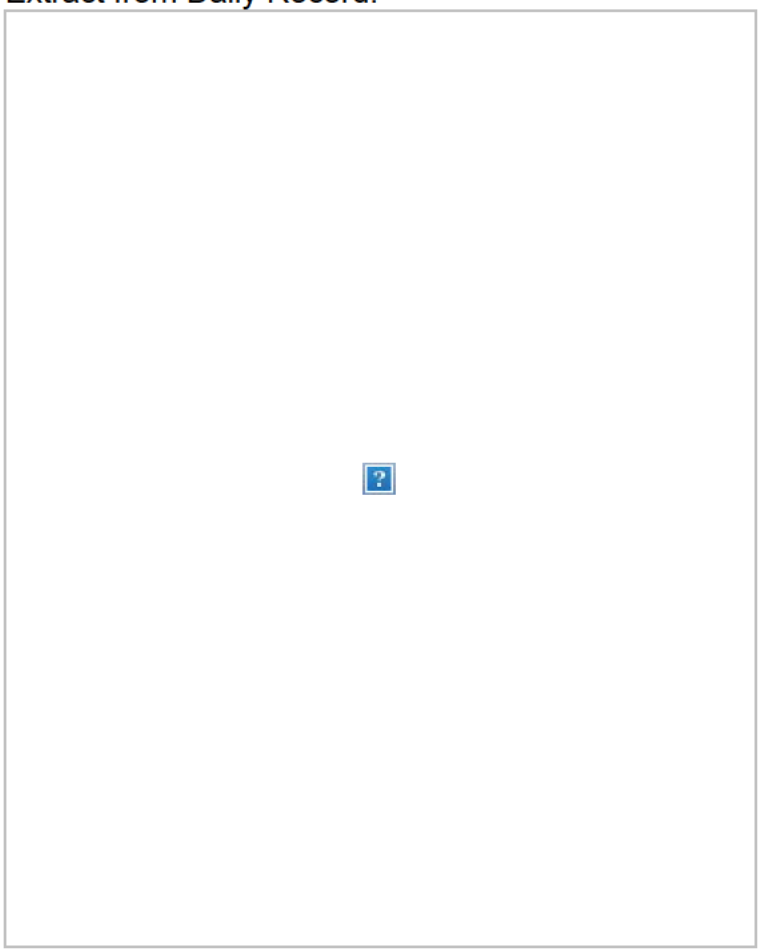
Scottish Water's published document describes Settled Storm Sewage Overflow (SSSO) as intermittent discharges that receive settlement or primary treatment before discharge to the environment. Settlement can be in primary tanks or storm tanks. In comparison it describes combined sewer overflows (CSO) as located anywhere on the sewerage network, at a sewage pumping station or on an inlet sewer to the Waste Water Treatment Works (WwTW). Flows in excess of the licence pass forward flow will discharge to the environment and are not treated.

Scottish Water reported 195 spills in Ms McAllan's Clydesdale constituency in 2022 – all from Biggar Wastewater Treatment Works (WwTWs). Only 11 of the spill discharges (6%) were from Biggar WwTWs CSO, with the remainder coming

from the SSSO and having received settlement treatment. We therefore suggest the following line to take in relation to the 195 spills figure in the Daily Record article, if required.

- [redacted]

Extract from Daily Record:



22 May Daily Mail (Scotland) I'd think twice about swimming in the sea after heavy rainfall due to sewage...says Scottish Water boss. [headline misrepresents BBC interview where Simon Parsons indicated he would follow SEPA's guidance before swimming]
21 May Scotsman reports How sewage that could fill 19,000 swimming pools was spilled in Scottish waters in 2022.
19 May BBC, Herald, The Times and Scottish Daily Express report on Marine Conservation Society call for greater monitoring of sewage spills in Scotland and spill reduction targets to be set by SG.
18 May Alex Cole-Hamilton submitted a motion (S6M-08949) calling on Parliament to note Scottish Water's 14k sewage spill figures for 2022 and every sewage dump to be properly recorded and published, and for the upgrading of Scotland's ageing sewage system.
16 May Water UK apologised for performance in E and W sewage spills, announcing creation of an environmental info. hub and bringing forward a storm overflow plan this summer with fast-tracking £10bn of funding [does not apply to Scotland – action we are taking is outlined in note below].
15 May]iNews] Alex Cole-Hamilton asks why sewage is regularly being discharged into sites with special environmental protections in place and calls on FM to intervene.
6 May STV News online Overflow data from Scottish Water revealed that more than nine million litres of raw sewage spilled into Fife's River Eden, Forth Estuary and the North Sea in 2022. The data was obtained by councillor James Calder (Lib-Dem) who has put forward a motion at Fife Council pushing for action.
31 Dec 2022 Scotsman and Herald Mark Ruskell MSP calls for Loch Leven to be designated as a bathing water to protect water quality.
14 Dec 2022 Minister for Environment and Land Reform meeting with Mark Ruskell MSP discussed River Basin Management Plan ambitions, Scottish Water's Improving Urban Waters Route Map commitments and Loch Leven phosphorus pollution issues were raised.
Recent PQs (no MiCases) (see Annex A for responses)
16 Mar To ask the Scottish Government, further to the answer to question S6W-13240 by Mairi McAllan on 5 January 2023, what consideration it has given to alternative sewage treatment options to UV treatment, outside of bathing seasons.
12 Jan To ask the Scottish Government what consideration it has given to expanding the UV treatment of sewage to outside of bathing seasons.
5 Dec 2022 To ask the Scottish Government whether it will provide an update on the action it is taking to protect freshwater habitats from diffuse agricultural pollution.

RIVER BASIN MANAGEMENT PLANNING

Comprehensive monitoring of water bodies is undertaken by SEPA to assess water quality, water resources, physical condition and aquatic ecology which are combined to produce an overall classification of the water environment.

Overall, 66% of the water environment (rivers, lochs, coastal areas and groundwater) is currently classified in good condition compared to 16% based on the latest figures published by SEPA and England's Environment Agency.

For each of the 4 key water environment themes, by 2027, the River Basin Management Plans aim for improvements in:

- **Water quality from 87% to 92% good**
- Water quantity from 90% to 96% good
- Fish migration from 88% to 99% good
- Physical condition from 90% to 92% good

Overall this represents a shift from 66% of our water environment classed as good in 2021 to 81% classed as good by 2027.

SCOTLAND'S WATER QUALITY

87% of Scotland's entire water environment is assessed by SEPA as having a 'high' or 'good' classification for water quality – up from 82% six years ago.

The upgrade in water quality reflects improvements made through Scottish Water's investment programme (£686 million between 2010-2021), and work by a range of stakeholders to improve rural land management practices to reduce diffuse pollution.

SEWAGE SPILLS

Scottish Water's Improving Urban Waters Route Map (December 2021), sets out a programme of continued action to reduce wastewater pollution and sewage litter over the coming decade backed by investment of up to half a billion pounds

Scottish Water is in the process of developing detailed solutions for 104 high priority unsatisfactory Combined Sewer Overflows (CSOs) due to their impact on water quality or sewage related debris.

Plans are already in place to address 24 high priority unsatisfactory Combined Sewer Overflows (CSOs) by 2027 as set out in the third River Basin Management Plan. Scottish Water is also developing solutions for 39 wastewater treatment works which are included as water quality improvement measures.

The first annual update to the route map was published in December 2022:

- *54 projects have already been initiated to address issues caused by high priority CSO discharges by 2027* in line with Scottish Water's capital investment process.
- Priority locations have been identified for 1,000 new spill monitors, with installation programmed over 2023 and 2024 at a value of £70m. The methodology for deciding these locations is on the Scottish Water website.
- Spill data which is reported to SEPA has already been published on Scottish Water's website.

OVERFLOW MONITORING

Rather than permanent monitoring, which is the common approach for water companies in England, Scottish Water carried out a more comprehensive Scotland-wide environmental study programme to assess and model the impacts of its assets on water quality during the 2015 to 2021 investment period costing £40m. English water companies have not yet undertaken the detailed environmental assessments that have been completed in Scotland.

These computer models can now allow Scottish Water to understand when CSOs will spill, under what rainfall conditions and the impact those spills will have on the environment.

Opposition MSPs, including Alex Cole-Hamilton, have pushed for all CSOs to be monitored in Scotland, as is the case in England. However, because sophisticated modelling has been developed for many large urban areas, this is not necessary. Instead, targeted monitoring is being put in place to support the information already obtained from the models and to support operational performance. We are very supportive of this evidence based and proportionate approach but are also investing on widening monitoring.

In its Improving Urban Waters Routemap Scottish Water has committed to install 1,000 new spill monitors **by the end of 2024** supported by an investment of **£70m**. Scottish Water has now identified locations and installation is programmed over 2023 and 2024; we understand the first phase rollout is scheduled to begin this summer, date tbc.

As part of this work, data capture and availability is being reviewed to allow further enhancements. Scottish Water will publish information on the number of days for which monitors are unavailable to support the reporting of 2023 overflow events in January 2024.

Increasing the monitoring of sewage outflow pipes would not change the classification of the water environment under the current system by SEPA, Scotland's independent environmental regulator. SEPA regularly monitors the water environment to ensure it is not impacted by sewage spills. In 2019, it took around 19,000 monitoring samples across Scotland to safeguard the water quality of our rivers, lochs and coastal areas.

ROLE OF COMBINED SEWER OVERFLOWS (CSOs)

Combined Sewer Overflows (CSOs) are an integral part of Scotland's sewer networks, ensuring sewers don't back up and flood homes, streets and sewage works during periods of heavy rainfall. It's not accurate to call CSO spills from the wastewater network sewage spills. What is spilled is largely rainwater as the toilet sewage element is less than 1% of the total volume.

SEPA is required by law to identify unsatisfactory CSOs, primarily for water quality or sewage related debris impacts, in order to reduce those impacts on the water environment. SEPA licences and regulates 345 sewer networks operated by Scottish

Water carrying out inspections on a rolling basis. In 2019 there were 7 out of 100 found not to be compliant with their licence conditions. SEPA took action to ensure compliance was achieved.

Scottish Water has reduced environmental pollution incidents by 60% over the last decade from 800 each year to fewer than 300, in spite of increasingly challenging weather patterns.

BATHING WATERS

98% of Scotland's bathing waters (87) currently achieve the bathing water quality standards with more being rated excellent than ever before. SEPA's classification of designated bathing waters gives an overall indication of expected water quality, but there can be short-term fluctuations in water quality driven by prolonged heavy rainfall.

In line with globally recognised guidance, SEPA advises against bathing for up to 48 hours after heavy rainfall due to the increased risk of poor water quality. SEPA's monitoring of Bathing Waters shows water quality can be impacted by a range of bacterial sources following heavy rain and not just sewage spills including agricultural land runoff, urban runoff, and dog and seagull faeces.

Contrary to the information reported recently in the media there are no sewage spills into Peterhead Lido bathing water and SEPA classifies the water quality there as excellent.

Lower Largo and Kinghorn, Fife are the only bathing waters currently classified by SEPA has having poor bathing water quality.

SEPA had previously undertaken comprehensive investigative improvement work with Scottish Water at Kinghorn to achieve a sufficient classification. SEPA is now working to identify the cause of this year's poor classification in order to rectify the source of any issues.

As agreed with SEPA, Scottish Water is conducting a full-scale bathing water quality study to identify bathing water quality improvement solutions at Lower Largo. Water quality data collection for these studies alone can take 1-2 years so water quality improvements are unlikely to be seen by the 2023 bathing water season.

Scottish Ministers designate bathing waters where a large number of people bathe considering past trends, facilities and infrastructure provided and promotion of bathing. The interpretation of a large number of bathers of around 150 daily bathers in Scotland is in line with those across Europe where the maximum figure used is 300 daily bathers. Anyone can propose a surface water area for consideration by Scottish Ministers for designation as a bathing water through the form available on SEPA's website.

WILD SWIMMING

Rivers and other open water locations that are not designated as bathing waters are managed for the purpose of protecting fish and wildlife. Water in these locations may contain levels of pathogens which are harmless to wildlife, but would not meet designated bathing waters standards. The UK Health Security Agency advises that anyone can become unwell from swimming in any open water, as there will always be micro-organisms present.

RURAL DIFFUSE POLLUTION

SEPA is responsible for regulating rural diffuse pollution from agriculture and other land management activities, such as forestry, which may impact on the water environment under General Binding Rules in the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR). The Water Environment (Controlled Activities) (Scotland) Amendment Regulations 2021 recently updated CAR by introducing more effective slurry management requirements to reduce diffuse pollution risks.

Since 2009, through River Basin Management Planning SEPA has identified 57 priority catchment areas where additional intervention is needed to tackle agricultural pollution. This priority catchment approach, involving catchment-based farm visits, has been successful in building a strong working relationship between the agricultural sectors and SEPA. To date, SEPA has completed over 6000 initial farm visits and 3500 revisits to non-compliant operators in 38 of these priority catchments with six now regarded by SEPA as reaching full compliance.

SEPA's Priority Catchment farm visit programme, which has been in operation for over ten years across Scotland, was highlighted on a BBC Wales investigative episode into agricultural pollution in 2022 as an innovative and effective approach to reducing rural diffuse pollution.

SEPA will continue to complete ongoing diffuse pollution compliance work in the other 32 catchments by 2027. Phased work in the remaining 19 priority catchments began in October 2022 with initial visits by SEPA in two new catchments – Wick and Thurso - and as of 1 November initial farm visits have commenced in the River Leven catchment.

LOCH LEVEN

You recently wrote to the leader of Perth and Kinross Council, Grant Laing , in March responding to its concerns setting out the ongoing River Basin Management Plan objectives aiming to reduce phosphorus pollution in Loch Leven.

SEPA currently classifies Loch Leven as moderate for water quality due to nutrients (nitrogen and phosphorus). In the River basin Management Plan, SEPA has identified that these nutrient levels are due to rural diffuse pollution. An independent study by the UK Centre for Ecology & Hydrology found that the vast majority (86%) of phosphorus inputs to the catchment come from rural diffuse pollution, supporting SEPA's approach.

Scotland's River Basin Management Plan target objective for Loch Leven water quality is Moderate by 2027 and Good in the long-term. This is an acknowledgement that whilst measures will be put in place aiming to reduce phosphorus and nitrogen pollution before 2027 the natural recovery of the ecology of Loch Leven will take longer.

SEPA's Priority Catchment farm visits, aiming to reduce rural diffuse pollution started in November 2022 in the North and South Queich rivers which feed into Loch Leven. It is planned that all farm visits in catchments feeding into Loch Leven will be completed by March 2023. Further farm visit within the Loch Leven catchment will also be undertaken during the remainder of 2023.

Following a reported incident on 8 September 2022 at Loch Leven, SEPA inspected the location and found no evidence of sewage debris or pollution in the watercourse before it entered the loch. There was no discharge of untreated raw sewage from Kinross sewage works into the adjacent watercourse as the storm tanks only discharge effluent that has been treated. This was set out in the letter from the Scottish Government to Councillor Robertson on the 19 October 2022.

Recent inspections of the sewer network and sewage works in Kinross and Milnathort by SEPA showed compliance with licence conditions. Scottish Water has committed investment in recent years to improve infrastructure within Kinross sewage works.
SEPA will continue to monitor and work with Scottish Water as it invests and improves all sewage treatment plant sites, and will take proactive action where required.

[redacted]

From: [redacted]
To: Cabinet Secretary for Net Zero & Just Transition
Cc: [redacted] Rathjen J (Jon); [redacted]; Dobson L (Leanne)
Subject: RE: Water quality FMQ - Note to First Minister
Date: 12 May 2023 15:08:00
Attachments: Sewage spills - Rebuttal_11 May.docx
Sewage spills - Note to FM.docx

[redacted]

Please find an updated note with Ms McAllan's changes incorporated.

In relation to the Cabinet Secretary's first question, we have expanded the rebuttal note to provide clarification that additional CSO monitors would have no impact on the classification of the water environment; that is not how the current classification system operates.

In respect of her second question on proactive dumping, we can confirm that England has a similar sewage system to Scotland which originates from Victorian times and is facing the same pressures we are. Water companies in England and Wales are not doing anything different, or taking more proactive or deliberate action despite what may have been implied in some reports. However, in their case, the issues of population growth pressure and climate change are exacerbated due to the scale of the former. A culture of under-investment by the (privately-owned) English water companies to develop wastewater treatment capacity is often cited in parallel as one of the main reasons behind the increasing number of spills appearing in England and why they are reportedly so widespread. In Scotland, we are experiencing similar pressures on some treatment works as a result of west-east population shift for example, as well as climate change impacts and, as in England, a number of treatment works in Scotland are operating beyond their design capacity. It is true to say that some pumping of untreated effluent may occur in Scotland, due to topography or other hydrological constraints. An example of this would be where a works is receiving large volumes of water due to storm conditions and where local tidal pressures mean pumping is required to push back against tidal pressure in the outfall pipes. If this action weren't taken the works would be flooded. We therefore can't say that all wastewater is treated at a WwTW so it's best not to invite comparisons. We can, however, highlight that SW has a robust investment programme in place to allow projects to be promoted in a prioritised manner. As the Cabinet Secretary will be aware, SW is progressing work to understand the so-called 'pass-forward flow' at a selection of WwTWs to improve its understanding of what equipment may be required to reduce spills.

Thanks,

[redacted]
[redacted]
Water Policy
Scottish Government
Office: [redacted]
Mobile: [redacted]

From: [redacted]@gov.scot> **On Behalf Of** Cabinet Secretary for Net Zero & Just Transition
Sent: 09 May 2023 11:09
To: [redacted]@gov.scot>; Cabinet Secretary for Net Zero & Just Transition <CabSecNZJT@gov.scot>
Cc: [redacted]@gov.scot>; [redacted]@gov.scot>; [redacted]@gov.scot>; Rathjen J (Jon) <Jon.Rathjen@gov.scot>; [redacted]@gov.scot>; Dobson L (Leanne) <Leanne.Dobson@gov.scot>
Subject: RE: Water quality FMQ - Note to First Minister

Hi [redacted],

Ms McAllan has made some updates in track on note to FM, would be grateful if you could review this.

The Cab Sec is grateful for the note re Mr Cole-Hamilton and thinks this could helpfully accompany the note to FM seeing as Mr Cole-Hamilton and others may repeat some of the erroneous assertions.

In the margins of that, the Cab Sec would like to finally confirm that:

Where Mr Cole-Hamilton says ***'if we had the level of monitoring of sewage outflow pipes that they do in England, then SEPA would have to dramatically downgrade that level (the 66%)'*** **–** we can say that this is incorrect. Because the 66% figure is not derived from monitoring but from actual assessments of the physical marine environment***?***

Ms McAllan would also like more information regarding the point about 'proactive dumping'. Whereas this note is clear that is not the case in Scotland (with spilling happening as a mechanism to stop flooding and back – up) but do we know if it could be said water companies in England are undertaking something more akin to 'proactive'?

Many thanks

[redacted] to Cabinet Secretary for Net Zero and Just Transition - Màiri McAllan
The Scottish Government | Web: www.gov.scot |Tel: [redacted] Mob: [redacted] | Email: CabsecNZJT@gov.scot

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Scottish Ministers, Special advisers and the Permanent Secretary are covered by the terms of the Lobbying (Scotland) Act 2016. See www.lobbying.scot

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From: [redacted]@gov.scot>

Sent: 05 May 2023 15:02
To: Cabinet Secretary for Net Zero & Just Transition <CabSecNZJT@gov.scot>
Cc: [redacted]@gov.scot>; [redacted]@gov.scot>; [redacted]@gov.scot>; Jon Rathjen <Jon.Rathjen@gov.scot>; [redacted]@gov.scot>; Leanne Dobson <Leanne.Dobson@gov.scot>
Subject: RE: Water quality FMQ - Note to First Minister

Cabinet Secretary,

Please find a note for you to forward to the First Minister on the broader sewage spills issue following recent interventions from Alex Cole-Hamilton at FMQs.

I also attach an analysis of the points raised by Mr Cole-Hamilton during a recent interview and rebuttal lines to take; officials will discuss appropriate handling with comms colleagues.

We apologise for the length of the note but consider it important to fully set out the context.

Please let me know if you have any queries.

Thanks,

[redacted]
[redacted]
Water Policy
Scottish Government
Office [redacted]
Mobile: [redacted]

From: [redacted]@gov.scot> **On Behalf Of** Cabinet Secretary for Net Zero & Just Transition
Sent: 28 April 2023 12:09
To: [redacted]@gov.scot>; [redacted]@gov.scot>; [redacted]@gov.scot>; Rathjen J (Jon) <Jon.Rathjen@gov.scot>; [redacted]@gov.scot>; [redacted]@gov.scot>; [redacted]@gov.scot>
Cc: Cabinet Secretary for Net Zero & Just Transition <CabSecNZJT@gov.scot>; Dobson L (Leanne) <Leanne.Dobson@gov.scot>; Deputy Director Environmental Quality and Resilience <DDEQR@gov.scot>
Subject: FOR ACTION: water quality

Hi all,

Further to today's FMQ from Lib Dem's, Cab Sec would welcome a short note prepared bringing FM up to speed on the urban waters route map etc.

The Cab Sec will approve and notes it should be non-technical.

th

It would be helpful to have this by 3pm Friday 5 May.

Many thanks

[redacted] | [redacted] to Cabinet Secretary for Net Zero and Just Transition - Màiri McAllan
The Scottish Government | Web: www.gov.scot |Tel: [redacted] Mob: [redacted] | Email: CabsecNZJT@gov.scot

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Sewage on Scottish beaches – Alex Cole-Hamilton BBC Radio Scotland FM The Sunday Show Sunday 30 April 2023 - Background and Rebuttal lines

Introduction

Following points raised in FMQs on Thursday 27th April, Alex Cole-Hamilton MSP took part in BBC Radio Scotland's Sunday Show on Sunday 30 April to express concerns about the lack of monitors on Scotland's sewer network, citing research by the Liberal Democrats highlighting sewage spills near to a number of designated bathing beaches. Mr Cole-Hamilton is referring to Event Duration Monitors (EDMs) which provide an alert in the event of a sewage spill from the monitored asset and quoted data from Scottish Water's published spill data. It should be noted that the relevant published data presents information on event location and duration (e.g. storm-related events) but not in respect of actual environmental impact from what, in most cases, will be highly dilute spills considering the large volumes of surface water involved. It highlights a number of inaccuracies / lack of important context in the transcript of Mr Cole-Hamilton's interview, offers commentary on the issue raised and, where appropriate, offers rebuttal lines.

Assertion 1: '..there were 400 (sewage) dumping events besides, right in the vicinity of, some of Scotland's best-loved beaches up the east coast of Scotland'

Background

While the number of spill events quoted have been approximated, the data quoted is not essentially inaccurate, but lacks important context. Scottish Water's published spill data for 2022 indicates the majority of the spill events referred to by Mr Cole-Hamilton (337) were from Peterhead Wastewater Treatment Works (WwTW) Short Sea Outfall Combined Sewer Overflow (CSO). The outfall does not discharge into the bathing water and is not considered as likely to impact on bathing water quality given its location in relation to the beach area. While there were discharges throughout 2022 e.g. as a result of storm / heavy rainfall events, seasonal sampling undertaken by SEPA between June and mid-September indicated no issues at the bathing water and Peterhead Lido is currently classified by SEPA as 'excellent' for bathing water quality. When deciding upon the levels of treatment at WwTW and the number and volume of spills that should be allowed from overflows, modelling is undertaken (in line with SEPA policy) to demonstrate that these discharges will not impact the bathing water, allowing water quality targets to be met. This might mean that discharges are physically moved (i.e. to a longer distance offshore where impacts will be minimised). 'Excellent' is the highest standard that can be met. Not all bathing waters meet this standard but, in general, this is because of other, non-Scottish Water impacts e.g. from agricultural run-off. Scottish Water has invested many tens of £millions to protect and improve Bathing Waters

[redacted]

Assertion 2: *'There's no strategy for upgrading Scotland's Victorian sewage system'*

Background

We have been working to understand and address this issue for some time. Scottish Water carried out a comprehensive Scotland-wide environmental study programme to assess the impacts of its assets on water quality during the 2015-2021 investment period costing £40m**.** Scottish Ministers have supported Scottish Water's successful historical approach based on directing investment towards overflows which have an impact on the quality of the water environment. More recently Scottish Water have published its Improving Urban Waters Routemap which supports the 3rd River Basin Management Plan (RBMP3) published by SEPA in 2021 with the principal objective and aim for **all** water bodies to achieve 'good' ecological status by 2027. Indeed, the Routemap goes further than the RBMP3 in terms of monitoring, the reporting of data and action to reduce sewage-related debris.

[redacted]

Assertion 3. – 'Màiri McAllan who's the Cabinet Secretary responsible, once described this practice of dumping sewage as vital.'

Assertion 4: '….we are pumping thousands and thousands of gallons of untreated sewage in some cases and sanitary towels and wet wipes into our seas and rivers just at a time we need them to be as pristine as possible'.

Background

Assertion 3 refers to lines quoted by the Minister for Environment and Land Reform during a debate in Scottish Parliament in October 2022. These comments need to be seen in the wider context of explaining how Combined Sewer Overflows work in practice – i.e. such spills are indeed vital in preventing sewage from backing up into homes and businesses during intense rainfall events. Since Scotland has combined sewer systems (in the majority) we could not build in the capacity to deal with all statutory storm water within the system without spills. This is the nature of our current below-ground drainage system. The only way to change this would be to completely separate the storm water and foul drainage systems.

[redacted]

Assertion 5: '…we monitor 4% of sewage outflows. It could be many, many times the volume of sewage that I first told you about at the start of the article, whereas in England they monitor over 70%. They have a much better handle on the scale of the problem. That's the first step on the road to addressing it.'

Assertion 6: '…if we had the level of monitoring of sewage outflow pipes that they do in England, then SEPA would have to dramatically downgrade that level (i.e. SEPA's assessment of the ecological condition/water quality etc of Scotland's water environment) because if we were clear that we had thousands of hours, and it is sometimes thousands of hours, and in one case it was 400 days of unremitting sewage spill into a river, that they would have to reassess those numbers'.

Background

Mr Cole-Hamilton is correct in so far as the approach in Scotland historically has not been to install permanent monitors across the entire sewer network but instead to focus efforts on assessed environmental impact i.e. where the biggest spills would be expected. (see background to Assertion 2, above)

While English water companies have been funded to roll out monitors to give 100% coverage across their networks and have been making good progress, there have been press reports (and anecdotal evidence from industry contacts) that many monitors have failed or are failing, potentially because of shortcomings with the technology deployed and speed of rollout. English water companies have not yet undertaken the detailed environmental assessments that have been completed in Scotland. Despite not having monitors, we have taken other approaches (i.e. modelling) to demonstrate where the problems are and what the solutions look like. Our assessment is that years of work is required for England to reach an equivalent position.

The types of monitor in question can generally only tell whether an asset is spilling, not if there is an environmental impact. Ministers have therefore supported Scottish Water's approach of directing investment towards CSOs which have an impact on the quality of the water environment, assessed through detailed studies. That said, we acknowledge the benefits monitoring can deliver; monitors will provide improved transparency, validate the investigations already carried out, allow proactive operational response and help refine the scale of solutions required. In its Improving Urban Waters Routemap, Scottish Water has committed to install 1,000 new spill monitors **by the end of 2024** supported by an investment of **£70m**. Having taken a considered approach, including carefully reviewing the technical capability of available types of monitors, Scottish Water has now identified locations and installation is programmed over 2023 and 2024; we understand the first phase rollout is scheduled to begin this summer, date tbc.

Scotland's third River Basin Management Plan (RBMP) sets statutory objectives to protect and improve Scotland's water environment by 2027. It is underpinned by evidence and information so that action is targeted where it can have the greatest ecological benefit. To achieve this, SEPA monitors the environment to assess the condition of water quality, water resources, physical condition and fish migration.

[redacted]

From:	[redacted]
To:	zzzCabinet Secretary for Net Zero & Just Transition
Cc:	Leanne Dobson; Jon Rathjen; [redacted]; DG Net Zero; Kersti Berge; Communications Net Zero & Rural Affairs; Deputy Director Environmental Quality and Resilience; [redacted]; First Minister; [redacted]
Subject:	Sewage pollution - Water UK announcement - Thursday 18th May
Date:	16 May 2023 19:16:00
Importance:	High

Cabinet Secretary

This is to make you aware an impending announcement we understand will be made by Water UK (utilities representative body) on Thursday morning (18th May) in response to growing public concern about sewage pollution that amounts to a so-called 'industry re-set' and an apology for performance on overflows and sewage spills, announcing the creation of an environmental information hub and bringing forward a storm overflow plan this summer with fast-tracking £10bn of funding. We do not yet know the detail, but understand other related announcements are being made in the run up, including from Ofwat re investment and regulation & also from Defra re budget/funding.

These are not announcements that apply to Scotland. However, we can expect to receive enquiries and for the Lib Dems in particular to seek to make political capital of the announcement and push heavily on their views about the Scottish position.

We have been in contact with Scottish Water who are reviewing their lines and will continue to liaise with them to ensure consistency of message. SEPA are also aware. As you know, we have refined our own robust lines on these issues setting out how Scotland is currently in a far better position than England & Wales given the detailed study-based approach we have undertaken in the past, the very significant investments already made or committed by Scottish Water to address water quality issues, and in relation to progress against their Improving Urban Waters Routemap. From what we currently understand, the announcement may amount to committing water companies in England in Wales to the type of actions and investment that have already happened in Scotland and which have contributed to the considerably higher water quality SEPA's assessments show.

We will liaise with Comms colleagues on appropriate lines as we know more and of course keep you fully informed. I have copied FMPO for awareness given recent FMQs and your note to FM on the subject and in light of the related meeting with Scottish Water which is in the process of being arranged.

[redacted] **| Water Policy and DECC Operations Division | Scottish Government | 3F South | Victoria Quay | Edinburgh | EH6 6QQ |** [redacted]

I am currently working mostly from home, my normal working hours are 07:00-17:00

SEWAGE SPILLAGES

24 May Scotsman reports crisis of sewage in rivers and at beaches was entirely predictable, with overflowing sewers made part of the system and climate change ignored.
22 May Daily Mail (Scotland) I'd think twice about swimming in the sea after heavy rainfall due to sewage...says Scottish Water boss. [headline misrepresents BBC interview where Simon Parsons indicated he would follow SEPA's guidance before swimming]
21 May Scotsman reports How sewage that could fill 19,000 swimming pools was spilled in Scottish waters in 2022.
21 May Surfers Against Sewage UK wide protest at 12 locations including Portobello beach, Edinburgh calling for increased monitoring and a 90% reduction in sewage discharges by 2030.
19 May BBC, Herald, The Times and Scottish Daily Express report on Marine Conservation Society call for greater monitoring of sewage spills in Scotland and spill reduction targets to be set by SG.
18 May Alex Cole-Hamilton submitted a motion (S6M-08949) calling on Parliament to note Scottish Water's 14k sewage spill figures for 2022 and every sewage dump to be properly recorded and published, and for the upgrading of Scotland's ageing sewage system.
16 May Water UK apologised for performance in E and W sewage spills, announcing creation of an environmental info. hub and bringing forward a storm overflow plan this summer with fast-tracking £10bn of funding [does not apply to Scotland – action we are taking is outlined in note below].
15 May]iNews] Alex Cole-Hamilton asks why sewage is regularly being discharged into sites with special environmental protections in place and calls on FM to intervene.

TOP LINES

We take very seriously the issue of sewage pollution incidents, and the former Minister for Environment and Land Reform's statement in Parliament in December 2021 set out comprehensive plans to reduce sewage spills over the coming decade.

- Scottish Water's Improving Urban Waters Route Map (December 2021), sets out a programme of continued action to reduce wastewater pollution and sewage litter over the coming decade backed by investment of up to half a billion pounds (*rebuttal to ACH claim that there is no strategy for upgrading Victorian sewers*).
- The first annual update to the route map was published in December 2022:
  - *54 projects have already been initiated to address issues caused by high priority CSO discharges by 2027* in line with Scottish Water's capital investment process.
  - Priority locations have been identified for 1,000 new spill monitors, with installation programmed over 2023 and 2024 at a value of £70m. The methodology for deciding these locations is on the Scottish Water website.
  - Spill data which is reported to SEPA has already been published on Scottish Water's website.

SEWAGE SPILLAGES

Scottish Water is in the process of developing detailed solutions for 104 high priority unsatisfactory Combined Sewer Overflows (CSOs) due to their impact on water quality or sewage related debris.

- Plans are already in place to address 24 high priority unsatisfactory Combined Sewer Overflows (CSOs) by 2027 as set out in the third River Basin Management Plan.
- Scottish Water is also developing solutions for 39 waste water treatment works which are included as water quality improvement measures.

SCOTLAND'S WATER QUALITY

87% of Scotland's entire water environment is assessed by SEPA as having a 'high' or 'good' classification for water quality – up from 82% six years ago.

- SEPA reports that 66% of Scotland's water environment meets 'good' ecological status overall, whereas, Environment Agency figures for England are only 16% *(rebuttal to ACH claim that England has 'more of a handle' on sewage issue)*.
- The upgrade in water quality reflects improvements made through Scottish Water's investment programme, and work by a range of stakeholders to improve rural land management practices to reduce diffuse pollution.
- SEPA's data indicates that 56% of rivers are in overall good condition, and for water quality the figure is much higher at 85%.

OVERFLOW MONITORING

Rather than permanent monitoring, which is the common approach for water companies in England, Scottish Water carried out a more comprehensive Scotland-wide environmental study programme to assess the impacts of its assets on water quality during the 2015 to 2021 investment period costing £40m (*rebuttal to ACH claim that Scotland does not monitor sewage outflow)*

- English water companies have not yet undertaken the detailed environmental assessments that have been completed in Scotland.
- SEPA regularly monitors the water environment to ensure it is not impacted by sewage spills.
- In 2019, it took around 19,000 monitoring samples across Scotland to safeguard the water quality of our rivers, lochs and coastal areas.
- SEPA licences and regulates 345 sewer networks operated by Scottish Water carrying out inspections on a rolling basis.
- In 2019 there were 7 out of 100 found not to be compliant with their licence conditions. SEPA took action to ensure compliance was achieved.
- Scottish Water's Improving Urban Waters Routemap outlines the significant investment underway to increase data monitors on our overflows by the end of 2024. As part of this work, data capture and availability is being reviewed to allow further enhancements.
- Scottish Water will publish information on the number of days for which monitors are unavailable to support the reporting of 2023 overflow events in January 2024.
- Comprehensive monitoring of water bodies is undertaken by SEPA to assess water quality, water resources, physical condition and aquatic ecology which are combined to produce an overall classification of the water environment.

- Increasing the monitoring of sewage outflow pipes would not change the classification of the water environment under the current system by SEPA, Scotland's independent environmental regulator.

ROLE OF COMBINED SEWER OVERFLOWS (CSOs)

Combined Sewer Overflows (CSOs) are an integral part of Scotland's sewer networks, ensuring sewers don't back up and flood homes, streets and sewage works during periods of heavy rainfall.

- It's not accurate to call CSO spills from the waste water network sewage spills. What is spilled is largely rain water as the toilet sewage element is less than 1% of the total volume.
- Scottish Water has reduced environmental pollution incidents by 60% over the last decade from 800 each year to fewer than 300, in spite of increasingly challenging weather patterns.
- Scottish Water's national campaign 'Nature Calls' raises awareness of sewer blockages caused by inappropriately-flushed items such as wet wipes containing plastic and other personal hygiene products.
- SEPA is required by law to identify unsatisfactory CSOs, primarily for water quality or sewage related debris impacts, in order to reduce those impacts on the water environment.
- Scottish Government recognises the multiple benefits that blue and green infrastructure provides to support climate and water resilience, including combined sewer overflow spill reduction, and published the Water Resilient Places Policy Framework in February 2021.
- Scottish Water, SEPA and the local authorities support the framework and we will continue to see increased use of blue and green infrastructure in future as this becomes the primary method for managing surface water.

BATHING WATERS

98% of Scotland's bathing waters currently achieve the bathing water quality standards with more being rated excellent than ever before.

- In line with globally recognised guidance, SEPA advises against bathing for up to 48 hours after heavy rainfall due to the increased risk of poor water quality.
- SEPA's monitoring of Bathing Waters shows water quality can be impacted by a range of bacterial sources following heavy rain and not just sewage spills including agricultural land runoff, urban runoff, and dog and seagull faeces.
- There are no sewage spills into Peterhead Lido bathing water and SEPA classifies the water quality there as excellent.
- Portobello beach designated bathing waters currently meet the stringent bathing water quality standards set by Europe and recommended by the World Health Organisation.
- Scottish Ministers designate bathing waters where a large number of people bathe considering past trends, facilities and infrastructure provided and promotion of bathing.

- The interpretation of a large number of bathers of around 150 daily bathers in Scotland is in line with those across Europe where the maximum figure used is 300 daily bathers.

WILD SWIMMING

Rivers and other open water locations that are not designated as bathing waters are managed for the purpose of protecting fish and wildlife.

- Water in these locations may contain levels of pathogens which are harmless to wildlife, but would not meet designated bathing waters standards.
- The UK Health Security Agency advises that anyone can become unwell from swimming in any open water, as there will always be micro-organisms present.

WATER OF LEITH

Scottish Water confirm that 24 Unsatisfactory Combined Sewer Overflows (CSOs) that discharge into the Water of Leith have been assessed as High Priority by Scottish Water and are in the solution development phase.

- The former Minister for Environment and Land Reform recently wrote to local MSP, Ben McPherson responding to SaveOurShore Leith's concerns.

RIVER ALMOND

Scottish Water is planning to invest up to £50m to deliver water quality improvements to the River Almond by 2027 to meet Scottish Government's River Basin Management Planning objectives.

[redacted]

SEWAGE SPILLAGES

27 Feb i news reports that the River Clyde is among 20 rivers across the UK that the Wildlife Trusts have pinpointed as facing a particular threat from pollution linked to human illnesses and the death of wildlife.
27 Feb i news / The Scotsman reports that the monitoring of sewage discharges into Scotland's rivers must be dramatically improved amid fears official figures are underestimating the problem, conservationists say. Data published by Scottish Water shows that between 2017 and 2021, sewage has overflowed into rivers and water courses 54,289 times - equal to almost 30 times per day.
Lib Dems re-tweeted the iNews article.
Note: The iNews article presents <u>incorrect</u> information on the position in Scotland. [claim of 40% of Scotland's rivers in overall good condition] SEPA's data indicates that 56% of rivers are in overall good condition, and for water quality the figure is much higher at 85%.]
3 Nov PQ- S6O-01493 Alex Cole-Hamilton: To ask the Scottish Government whether it will provide an update on what action it is taking to address the discharge of sewage into rivers, lochs and waterways.
26 Oct S6M-06148: Alex Cole-Hamilton: Sewage and Scotland's Waters motion that the Parliament notes the view that the natural environment deserves the highest possible protection; noting previous media reports re sewage spills and bathing waters; and notes the calls from campaigners for targets to be set to reduce discharges, for enhanced monitoring to be backed up by transparent reporting, and for the acceleration of measures to upgrade sewage systems and tackle overflows.

TOP LINES

<u>We take the issue of sewage spills very seriously. The Minister for Environment and Land Reform's statement in Parliament in December 2021 set out comprehensive plans to reduce sewage spills over the coming decade.</u>

- Scottish Water's Improving Urban Waters Route Map (December 2021), sets out a programme of continued action to reduce wastewater pollution and sewage litter over the coming decade backed by investment of half a billion pounds.
- The first annual update to the route map was published in December 2022:
    - 54 projects have been initiated to develop solutions and support delivery of all high priority CSO discharges by 2027.
    - These projects will develop over the next two years, in line with Scottish Water's capital investment process.
    - priority locations have been identified for the 1,000 spill monitors, with installation programmed over 2023 and 2024.
    - Spill data which is reported to SEPA has already been published on Scottish Water's website.

<u>SEPA's data indicates that 56% of rivers are in overall good condition, and for water quality the figure is much higher at 85%.</u>

SEWAGE SPILLAGES

66% of Scotland's overall water environment meets 'good' ecological status.

- Scottish Water has made a commitment to invest up to £70m to install 1,000 new monitors, including those at bathing waters, and will provide this spill information online to the public by December 2024.
- Scottish Water is in the process of developing solutions for 104 high priority unsatisfactory Combined Sewer Overflows (CSOs) due to their impact on water quality or sewage related debris.
- 24 high priority unsatisfactory Combined Sewer Overflows (CSOs) are included as water quality improvement measures in the third River Basin Management Plans.
- Scottish Water is also developing solutions for 39 waste water treatment works which are included as water quality improvement measures.

SCOTLAND'S WATER QUALITY

87% of Scotland's entire water environment is assessed by SEPA as having a 'high' or 'good' classification for water quality – up from 82% six years ago.

- This upgrade in water quality reflects improvements made through Scottish Water's investment programme, and work by a range of stakeholders to improve rural land management practices to reduce diffuse pollution.
- SEPA reports that 66% of Scotland's water environment meets 'good' ecological status, whereas, Environment Agency figures for England are only 16%.

ROLE OF COMBINED SEWER OVERFLOWS (CSOs)

Combined Sewer Overflows (CSOs) are an integral part of Scotland's sewer networks, ensuring sewers don't back up and flood homes, streets and sewage works during periods of heavy rainfall.

- Scottish Water has reduced environmental pollution incidents by 60% over the last decade from 800 each year to fewer than 300, in spite of increasingly challenging weather patterns.
- SEPA is required by law to identify unsatisfactory CSOs, primarily for water quality or sewage related debris impacts, in order to reduce those impacts on the water environment.
- A monitor only indicates whether an asset is spilling; it does not confirm if there is an environmental impact.
- Rather than permanent monitoring, which is the common approach for water companies in England, Scottish Water carried out a more comprehensive Scotland-wide environmental study programme to assess the impacts of its assets on water quality during the 2015 to 2021 investment period costing £40m.
- This comprehensive Scottish Water environmental study programme contributed significantly to 654 out of 3,614 CSOs being identified as unsatisfactory by SEPA.
- SEPA regularly monitors the water environment to ensure it is not impacted by sewage spills.
- In 2019, it took around 12,000 monitoring samples across Scotland to safeguard the water quality of our rivers, lochs and coastal areas.
- SEPA licences and regulates 345 sewer networks operated by Scottish Water carrying out inspections on a rolling basis.

SEWAGE SPILLAGES

- In 2019 there were 7 out of 100 found not to be compliant with their licence conditions. SEPA took action to ensure compliance was achieved.
- Scottish Water's new national campaign 'Nature Calls' urges customers not to flush wet wipes (and other items) down the toilet.
- We encourage the UK Government and other administrations to work with us to bring forward a ban on wet wipes containing plastic, and to ensure that products on the market meet the Fine to Flush standard.
- Scottish Water have confirmed that 90 CSOs in Edinburgh have been identified for monitoring.

RIVER BASIN MANAGEMENT PLANS

Scotland's third River Basin Management Plans, published in December 2021 by SEPA, set out our aims and objectives to improve the water environment to good ecological status by 2027.

- The Plans include a wide range of measures which aim to ensure that 92% of Scotland's water environment has a classification of 'good' or better water quality by 2027.
- These measures will improve water quality in the River Clyde, which is currently assessed as "moderate".
- The River Basin Management Plans are complemented by Scottish Water's 'Improving Urban Waters Route Map', which describes how Scottish Water will take further action to reduce wastewater pollution and sewage litter over the coming decade.
- The **One Health Breakthrough Partnership** (OHBP), funded by the Scottish Government, brings together key stakeholders across the water, environment, and healthcare sectors who are committed to addressing pharmaceutical pollution in the environment.

LOCH LEVEN

Following the incident on 8 September, SEPA inspected the location and found no evidence of sewage debris or pollution in the watercourse before it entered Loch Leven.

- There was no discharge of untreated raw sewage from Kinross sewage works into the adjacent watercourse as the storm tanks only discharge effluent that has been treated. This was set out in the letter from the Scottish Government to Councillor Robertson on the 19 October.
- Recent inspections of the sewer network and sewage works in Kinross and Milnathort by SEPA showed compliance with licence conditions.
- Scottish Water has committed investment in recent years to improve infrastructure within Kinross sewage works.

RIVER ALMOND

Scottish Water is planning to invest up to £50m to deliver water quality improvements to the River Almond by 2027 to meet Scottish Government's River Basin Management Planning objectives.

SEWAGE SPILLAGES

BATHING WATERS

This year, 98% of designated bathing waters (87) achieved the bathing water quality standards.

- The findings presented in the Ferret article were not produced by SEPA and do not in SEPA's opinion reflect how advice on water quality should be provided to the public during the bathing season.
- Bathing Water classification in Scotland is undertaken by SEPA following strict EU standards as set out in the Bathing Waters (Scotland) Regulations 2008.
- These standards were reviewed by the World Health Organisation in 2018, which concluded they were fit for purpose.
- Bathing Waters classification gives an overall indication of expected water quality, but there can be short term fluctuations in water quality driven by heavy rainfall.
- SEPA investigates poor water quality sample results to seek overall improvements to bathing water quality.
- SEPA's monitoring of Bathing Waters shows water quality can be impacted by a range of bacterial sources following heavy rainfall and not just sewage spills, including agricultural land runoff, urban runoff, dog and seagull faeces.
- A small number of 'poor' monitoring results at each designated Bathing Water does not mean that water quality is continually poor on all days. SEPA has analysed 1,297 water quality samples from 87 designated Bathing Waters this season and 93% were found to be at safe levels.

WILD SWIMMING

Rivers and other open water locations that are not designated as bathing waters are managed for the purpose of protecting fish and wildlife.

- Water in these locations may contain levels of pathogens which are harmless to wildlife, but would not meet designated bathing waters standards.
- The UK Health Security Agency advises that anyone can become unwell from swimming in any open water, as there will always be micro-organisms present.

[redacted]

SEWAGE SPILLAGES

30 Apr Alex Cole Hamilton BBC Radio Scotland The Sunday Show interview 'Sewage on Scottish Beaches, rebuttal lines provided below (underlined and italicised).
25 Apr Scot Lib Dems on Twitter: *"Across Scotland there were 14,008 disgusting sewage overflows like this. The Scottish Government are neglecting our rivers and waterways. The new Environment Secretary must ensure monitoring of is ramped up so we get a true picture of the scale of this disgusting problem."*
25 Apr Scot Lib Dems on Twitter:"*Stop Sewage Dumping campaign petition: Sewage was released into our rivers and waterways more than 14,000 times in Scotland last year".*
8 Apr: Record highlights that Feargal Sharkey demands answers after stretch of Scotland's most famous salmon fishing river deteriorates. A popular 20-mile section of the world-renowned River Spey has been classed as in 'poor ecological condition' since 2019.
5 Apr: The Ferret highlights a green charity has complained to Environmental Standards Scotland about the Scottish Government's allegedly "unlawful" approach to protecting bathing waters from sewage leaks, claiming it is the weakest in the UK.
5 Apr: STV News highlights Sewage released into Scottish waters more than 14,000 times last year.
30 Mar: Record highlight authorities in Scotland only required to monitor 4% of overflows, in comparison to 89% requirement in England. Highlight SEPA stats showing 10799 overspill events in Scotland in 2021, but volume not recorded for 5219 of these. Alex Cole Hamilton: *"There is every reason to believe the current volumes are a significant underestimate. The next Environment Secretary must listen to .. calls.. for targets to be set to reduce discharges, for enhanced monitoring to be backed up with transparent reporting, and for the acceleration of measures to upgrade sewage systems and tackle overflows".*

We take very seriously the issue of sewage spills, and the former Minister for Environment and Land Reform's statement in Parliament in December 2021 set out comprehensive plans to reduce sewage spills over the coming decade.

- Scottish Water's Improving Urban Waters Route Map (December 2021), sets out a programme of continued action to reduce wastewater pollution and sewage litter over the coming decade backed by investment of up to half a billion pounds (*rebuttal to ACH claim that there is no strategy for upgrading Victorian sewers*).
- The first annual update to the route map was published in December 2022:
  - *54 projects have already been initiated to address issues caused by high priority CSO discharges by 2027* in line with Scottish Water's capital investment process.
  - Priority locations have been identified for 1,000 new spill monitors, with installation programmed over 2023 and 2024 at a value of £70m. The methodology for deciding these locations is on the Scottish Water website.
  - Spill data which is reported to SEPA has already been published on Scottish Water's website.

SEWAGE SPILLAGES

Scottish Water is in the process of developing detailed solutions for 104 high priority unsatisfactory Combined Sewer Overflows (CSOs) due to their impact on water quality or sewage related debris.

- Plans are already in place to address 24 high priority unsatisfactory Combined Sewer Overflows (CSOs) by 2027 as set out in the third River Basin Management Plan.
- Scottish Water is also developing solutions for 39 waste water treatment works which are included as water quality improvement measures.

SCOTLAND'S WATER QUALITY

87% of Scotland's entire water environment is assessed by SEPA as having a 'high' or 'good' classification for water quality – up from 82% six years ago.

- SEPA reports that 66% of Scotland's water environment meets 'good' ecological status overall, whereas, Environment Agency figures for England are only 16% *(rebuttal to ACH claim that England has 'more of a handle' on sewage issue)*.
- The upgrade in water quality reflects improvements made through Scottish Water's investment programme, and work by a range of stakeholders to improve rural land management practices to reduce diffuse pollution.
- SEPA's data indicates that 56% of rivers are in overall good condition, and for water quality the figure is much higher at 85%.

ROLE OF COMBINED SEWER OVERFLOWS (CSOs)

Combined Sewer Overflows (CSOs) are an integral part of Scotland's sewer networks, ensuring sewers don't back up and flood homes, streets and sewage works during periods of heavy rainfall.

- Scottish Water has reduced environmental pollution incidents by 60% over the last decade from 800 each year to fewer than 300, in spite of increasingly challenging weather patterns.
- SEPA is required by law to identify unsatisfactory CSOs, primarily for water quality or sewage related debris impacts, in order to reduce those impacts on the water environment.
- A monitor only indicates whether an asset is spilling; it does not confirm if there is an environmental impact.

OVERFLOW MONITORING

Rather than permanent monitoring, which is the common approach for water companies in England, Scottish Water carried out a more comprehensive Scotland-wide environmental study programme to assess the impacts of its assets on water quality during the 2015 to 2021 investment period costing £40m *(rebuttal to ACH claim that Scotland does not monitor sewage outflow)*

- This comprehensive Scottish Water environmental study programme contributed significantly to 654 out of 3,614 CSOs being identified as unsatisfactory by SEPA.
- SEPA regularly monitors the water environment to ensure it is not impacted by sewage spills.
- In 2019, it took around 19,000 monitoring samples across Scotland to safeguard the water quality of our rivers, lochs and coastal areas.

SEWAGE SPILLAGES

- SEPA licences and regulates 345 sewer networks operated by Scottish Water carrying out inspections on a rolling basis.
- In 2019 there were 7 out of 100 found not to be compliant with their licence conditions. SEPA took action to ensure compliance was achieved.
- Scottish Water's Improving Urban Waters Routemap outlines the significant investment underway to increase data monitors on our overflows by 2024. As part of this work, data capture and availability is being reviewed to allow further enhancements.
- Scottish Water will publish information on the number of days for which monitors are unavailable to support the reporting of 2023 overflow events in January 2024.

BATHING WATERS

Scottish Ministers designate bathing waters where a large number of people bathe considering past trends, facilities and infrastructure provided and promotion of bathing. Two new bathing waters were designated in 2022 increasing the number of bathing waters across Scotland to 87 in total.

- 98% of Scotland's bathing waters currently achieve the bathing water quality standards with more being rated excellent than ever before.
- The interpretation of a large number of bathers of around 150 daily bathers in Scotland is in line with those across Europe where the maximum figure used is 300 daily bathers.
- The River Almond at Almondell, West Lothian has been the only bathing waters application in recent years that has been unsuccessful in meeting the large number of bathers criteria.
- In 2022, the former Minister for Environment and Land Reform responded in writing to local River Almond stakeholders and the Environment Rights Centre for Scotland, who represented them, explaining why the River Almond was not designated as a Bathing Water and the bathing waters designation process.

RIVER SPEY

A section of the River Spey was reclassified from moderate to poor for its physical condition in 2019 following a detailed field assessment by SEPA rather than any changes to the river. This did not relate to water quality as this section of river is currently classified at high status.

- Overall, 93% of the River Spey catchment is classified by SEPA as good or better for its physical condition and for water quality it's at 97%.

WATER OF LEITH

Scottish Water confirm that 24 Unsatisfactory Combined Sewer Overflows (CSOs) that discharge into the Water of Leith have been assessed as High Priority by Scottish Water and are in the solution development phase.

- The former Minister for Environment and Land Reform recently wrote to local MSP, Ben McPherson responding to SaveOurShore Leith's concerns

SEWAGE SPILLAGES

LOCH LOMOND AND THE TROSSACHS NATIONAL PARK

Scotland's River Basin Management Plan sets objectives aiming to improve Loch Lomond and the Trossachs National Park's water environment from 50% to 70% at good or better overall status by 2027.

- SEPA currently classifies 80% of the water environment at good or better water quality within the National Park and the River Basin Management Plan objectives aim to get to 92% by 2027.

RIVER ALMOND

Scottish Water is planning to invest up to £50m to deliver water quality improvements to the River Almond by 2027 to meet Scottish Government's River Basin Management Planning objectives.

LOCH LEVEN

The former Minister for Environment and Land Reform recently wrote to the leader of Perth and Kinross Council, Grant Laing responding to its concerns setting out the ongoing River Basin Management Plan objectives aiming to reduce phosphorus pollution in Loch Leven.

- The most recent independent scientific study concluded that 86% of the phosphorus load to Loch Leven was from rural diffuse pollution.
- SEPA's planned priority catchment work with land managers and farmers began in November 2022 and aims to reduce rural diffuse pollution to improve Loch Leven's water quality.

[redacted]