

# Chief Executive's Report

September 2025

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### 1. Introduction

It has been a busy summer period, with SEPA continuing to lead the way in delivering innovative, collaborative, and nature-based solutions to Scotland's environmental challenges. Our work spans local, national, and international initiatives, all aligned with our purpose to protect and improve Scotland's environment while supporting the health and wellbeing of the nation and sustainable economic growth.

Our teams have been developing SEPA's Annual Report and Accounts. This report will provide valuable insight into all our work to protect and improve Scotland's environment and tell some of the impactful stories of our delivery over the last financial year as well as meeting our statutory reporting duties.

As I noted in my last report, we have been working to strengthen our Performance Management Framework and our reporting mechanisms. We are now developing our refreshed corporate performance report for quarter one, which will follow our robust new framework of Objectives and Key Results (OKRs) and a range of Key Performance Indicators (KPIs), aligned to our corporate plan priorities. This will provide a comprehensive picture of how well we are delivering against our ambitions and ensure we can be held accountable by people and communities of Scotland.

As climate change accelerates, extreme weather events are changing from rare occurrences to the new normal. From torrential rainfall and flash floods to prolonged water scarcity and rising sea levels, Scotland is already feeling the impact. As Scotland's flood forecasting and warning authority and strategic flood risk management authority, we do all we can to help partners, places and people, avoid, adapt and act against flooding. This is why the innovative work delivered by the Centre of Expertise for Waters (CREW) to explore new technologies to evolve our flood forecasting and warning services is so important. The initial findings from this exciting feasibility project are positive and explored in more detail later in the report.

Over the summer months, SEPA has been closely monitoring and supporting Scotland through an exceptional period of water scarcity. Despite a wet and windy start to August, brought to Scotland by Storm Floris, and short, intense bursts of rainfall across parts of the country, most of the rainfall fell in areas not currently affected by water scarcity. Growing pressure across



Scotland's water environment has therefore resulted in the Agency issuing Significant Scarcity status for ten catchment areas - triggering the first water abstraction restrictions of 2025.

Although these measures are temporary and will be lifted as soon as conditions allow, this is not a decision we take lightly but they are ultimately essential to safeguard the environment, wildlife, and communities that depend on healthy rivers. We continue to publish <u>weekly Water Situation</u>

Reports to highlight the risks of water scarcity while sharing data, advice, and guidance with water users and abstractors to help them manage resources efficiently. You can find out more later in this report.

Over the period, we have also launched the new Authorisations and Compliance section on SEPA's Beta website to help businesses apply for and comply with authorisations under the Environmental Authorisation (Scotland) Regulations 2018 (EASR), developed free flooding resources for primary schools which are curriculum-linked and designed to educate and empower, and supported Scottish Water's Reservoir Dogs campaign to raise awareness about safety around Scotland's reservoirs.

We launched our new Applicant Tracking System (ATS) which marks a significant step forward in transforming and modernising our approach to recruitment and talent acquisition across the Agency. Our new ATS will make it easier and quicker for both existing colleagues and new applicants to explore and apply for opportunities within SEPA, delivering a much-improved experience for candidates and hiring managers while strengthening our biggest asset, our people.

I am also very pleased to note that our laboratories and sampling activities once again successfully maintained ISO 17025 accreditation by UKAS, the National Accreditation Body for the United Kingdom. This demonstrates the competence, independence and performance capability of our laboratories and ensures that our evidence is quality assured to the highest standards, a critical component of all that we do.

Over July and August, I was fortunate to attend many positive meetings internally and externally. In late June, I attended the inaugural meeting of the Scottish Biodiversity Portfolio Board which brought together experts and stakeholders from various sectors to champion biodiversity conservation across Scotland and deliver on Scotland's Biodiversity Strategy. We



discussed innovative strategies and approaches to protect our natural heritage, enhance ecosystems, and promote sustainable practices. It was inspiring to see such a diverse group of passionate individuals committed to making a positive impact on our environment and economy.

The Agency has a long standing and positive strategic relationship with the Met Office, and I had a very productive meeting with the Chief Executive where we discussed their newly launched strategy and current and future areas of collaboration. This was a fantastic opportunity to build on a relationship which supports our work in climate resilience and wider environmental issues central to SEPA's duties.

I attended the Blindwells mine water treatment scheme alongside the Chief Executive of the Mining Remediation Authority, who have a vision of 'making a better future for people and the environment in mining areas'. A highly informative visit was capped off with productive discussions on catchment approaches, water quality and areas of collaboration to harness opportunities while protecting Scotland's environment.

Over the period, SEPA was also proud to host the five environment agencies in Edinburgh, where discussion focused on transformation and operational and strategic engagement, while the leadership teams for SEPA and NatureScot came together with Scottish Government Environment and Forestry Directorate colleagues to discuss opportunities to deliver meaningful change around public sector reform.

As we look forward to the rest of the year, we remain focused on an exciting period of reset and transformation which is central to our ambitions and our future. We are progressing a range of initiatives to ensure we are more agile, integrated, effective and ultimately better equipped to manage change and deliver in a dynamic context.

A key part of our transformation programme is the development and launch of our new Data and Digital Strategies. These aim to ensure we maximise the use of well trusted data and actionable insights as assets to tackle complex environmental challenges while also ensuring we have future focused digital services which are accessible, innovative and responsive to rapidly changing environmental needs. Both strategies are essential foundations to deliver improved public services for the people, communities and businesses of Scotland, improved outcomes for Scotland's environment and lasting public value.



Finally, an exciting opportunity has arisen in the Agency as we look to recruit a new Chief Operating Officer, Regulation, Business and Environment. This is a fantastic opportunity for someone to work alongside SEPA's Corporate Leadership Team (CLT) and Agency Board to transform SEPA to meet the urgent environmental challenges we face and to maximise the opportunities presented through public sector reform.

This report features some highlights as our teams continue to deliver for Scotland.

For the future of our environment.

# 2. Collaboration and partnership

We recognise the impact of progressive partnerships and collaborative working across the public, private and third sectors, as well as with communities. We share service delivery so that we offer better outcomes more efficiently, and with a customer focus.



#### Uniting for nature in the Lothian Esk

The Lothian Esk Catchment Partnership is a new collaborative partnership launched in June 2025, to help restore ecosystems and tackle climate challenges in the Lothian Esk River catchment. Initiated by East Lothian Council, the partnership builds on Musselburgh's flood protection scheme and recognises the wider benefits of catchment restoration and natural flood management for local communities.

The partnership aims to deliver catchment-wide improvements in flood risk reduction, biodiversity and climate resilience. These goals align with SEPA's corporate ambition to reduce the damaging impacts of floods and droughts and help Scotland to prepare for and become more resilient to the impacts of a changing climate.

The partnership brings together SEPA, Forth Rivers Trust, East and Midlothian Councils, NatureScot and Scottish Water to harness expertise, collaborate and coordinate resources. We play a facilitative role in the partnership, providing data and advice on nature-based solutions, including providing River Basin Management Planning and flooding data, helping to target projects to areas where environmental improvements are needed or in areas affected by flooding, and connecting in to where SEPA restoration (Water Environment Fund) projects are happening.

Supported by £91,000 in funding from the Nature Restoration Fund, the Lothian Esk Catchment Partnership will develop a 'catchment route map' to guide future restoration efforts. Using drone surveys, flood modelling and biodiversity mapping, the partnership will work with communities and landowners to promote nature-based farming, create wetlands and introduce an agroforestry approach that integrates trees and shrubs into agricultural systems, providing environmental, economic, and social benefits.

SEPA launches Marine Pen Fish Farm CivTech Challenge 11.1



# **CivTech®**

# Challenge 11.1

How can technology help us to manage the impact of Marine Pen Fish Farms more sustainably?

Challenge Sponsor: Scottish Environment Protection Agency (SEPA)



<u>CivTech</u> is a Scottish Government innovation accelerator that brings the public, private and third sectors together to consider real problems faced by government departments, public sector organisations and charities.

We worked with CivTech to develop a project for the next round of challenges. Round 11, launched July 2025, offers £5.5 million in contract opportunities to address these problems.

As part of this initiative, we are inviting innovators to help develop a non-invasive, scientifically robust tool or method to assess the ecological impacts of marine pen fish farms on hard seabeds and sensitive marine habitats. These are areas where traditional sediment sampling is not possible or appropriate due to the impact on the protected feature.

#### Why it matters:

- It can help address how we monitor fish farm impacts on sensitive seabed habitats.
- A new solution would support sustainable aquaculture, protect fragile marine ecosystems and help fish farms meet environmental standards.
- Working with CivTech offers a valuable learning opportunity and will inform our own research, innovation and collaboration approach.
- This enables us to co-develop a cutting-edge solution, working directly with innovators during the accelerator phase (January to May 2026).

Find out more at Challenge 11.1: How can technology help us to manage the impact of Marine Pen Fish Farms more sustainably? (https://www.civtech.scot)

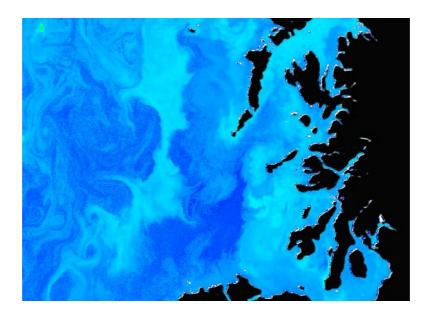
#### Beyond the Bucket: Reimagining Environmental Sampling from Space

The <u>Deloitte Gravity Challenge</u> is a global space-innovation programme that connects public and private sector organisations, data and technology providers, and startups or research teams to tackle pressing economic, social, and environmental challenges. The 2025 challenge is



focused on water quality monitoring, funded by the Australian and UK Space Agencies. It aims to leverage ground-to-space monitoring capabilities to address issues like:

- Droughts
- Algal blooms
- Sediment plumes



False colour satellite image showing patterns of chlorophyll-a in the Atlantic Ocean west of Scotland. Credit: Contains modified Copernicus Sentinel-3 data, May 2025.

We were invited to submit a challenge to the 2025 programme due to our membership of the Mission Advisory Group. The water quality focus aligns with several SEPA monitoring requirements; however, a clear front runner in terms of knowledge and impact is the ability to monitor and assess chlorophyll-a concentrations from space. Chlorophyll-a allows us to understand algal and nutrient levels in water. This is an area our Ecology and Environmental Quality functions have been working on for several years.

Our challenge was one of two selected to progress, attracting five proposals from across the globe. We have chosen to work with two teams (UK and Denmark based), both with exceptional experience in deriving water quality parameters and satellite products for organisations such as European Environment Agency and Wildfowl and Wetlands Trust.



In the next phase of the programme, we will co-develop chlorophyll assessment models that can be applied across Scotland, demonstrating how these can support SEPA's monitoring activities, improve the evidence which directs our regulatory focus and interventions, increase our efficiency and ultimately deliver better regulatory outcomes. The challenge also gives us access to innovative technology and extends our networks across the public, private and third sectors for future satellite focussed collaborations.

# Centre of Expertise for Waters (CREW) DelugeAl research project: Exploring the use of Artificial Intelligence for flood forecasting in Scotland.

Flooding is one of the most serious and increasing risks facing Scotland. Climate change is bringing more frequent and intense rainfall, placing growing pressure on the systems we rely on to keep people and places safe. At SEPA, we know that our flood forecasting and warning services must continue to evolve to tackle the climate emergency, and that means being open to new technologies while staying rooted in trusted principles.

The Centre of Expertise for Waters (CREW) at the University of Strathclyde led the DelugeAl project exploring how Artificial Intelligence and Machine Learning can enhance flood forecasting in Scotland. Through a review of recent research, real-world applications, and expert consultation with input from SEPA, the Scottish Government, Scottish Water, and the Environment Agency, the team identified key opportunities and challenges across seven stages of the forecasting process.

A feasibility study showed that Artificial Intelligence and Machine Learning could significantly improve early warnings and decision-making, especially when used alongside traditional methods. Potential benefits also include better integration of weather forecasts, improved data collection in remote areas, and enhanced model calibration—though these advanced applications will require further investment and testing.

Based on these findings, the project recommends a phased approach to introducing Artificial Intelligence tools, beginning with early warning systems and decision support. It also stresses the importance of clear communication, high-quality data, and continued human oversight of professional forecasters to maintain trust and effectiveness.



The research has delivered a recommended roadmap for us to follow, based on the understanding of our flood forecasting and warning service. We are now considering how we turn this into a realisable plan. Initial discussions are taking place to ensure alignment with a developing corporate AI Strategy and with the Flooding Programme Board, to consider an implementation strategy which supports our flooding service transformation and builds climate resilience.

#### Our reach is growing

We continue to see significant increased engagement with our newsletters and social channels. Our data from early August shows a 56% open rate in the first five minutes of our Net Zero newsletter and 71% in the first 24 hours on the business newsletter against a 35% benchmark average open rate. This is a positive indication that we are effectively positioning our messaging for people to access the content. We are also seeing a significant increase in the click through rate across our business, net zero and water environment newsletters over the period (from 3% baseline to around 10%), indicating increased engagement with our content.

Although this period is usually one of our quieter times for social media, we are continuing to see growth across all platforms. On Facebook, content views were up 56%, with reach increasing by over 40%, and averaging 70 clicks per post in some cases. Instagram reach grew by almost 23%, with interactions up more than 40%. LinkedIn, which often slows during the summer, continued to see steady engagement with our one-off articles and water scarcity updates drawing continued website traffic.

We are seeing more people viewing and engaging with our content comparatively to this time last year as well as a positive increase in traffic moving from social channels to our website as improvements continue. This lets us know that we are sharing the types of information our customers, stakeholders and the people of Scotland find useful and interesting. To join the mailing list for the SEPA Update, please register <a href="here">here</a>. You can also subscribe and read the <a href="latest update via LinkedIn">latest update via LinkedIn</a>.



### 3. Public Sector Reform

As a public service, we continue to respond effectively to the increasing pace of change, and we are committed to considering the best models for delivery of all our services. SEPA continues to lead and engage with a range of initiatives to further the objectives of public sector reform.

#### **Environment Futures Group: Priority catchments**

We continue to play a leading role in Scottish Government's Environment Public Service Reform initiative. Two priority catchments – the Aberdeenshire Dee and the Angus South Esk - have been selected to pilot a place-based approach dealing with rural land use, environmental impacts and opportunities. These live pilots will inform the ways in which public bodies work together and with others to maximise impact and improve outcomes.

The Cairngorms National Park Authority is leading the Aberdeenshire Dee work, while SEPA will lead on the Angus South Esk. The South Esk is of particular interest to SEPA due to the water environment and flooding challenges associated with the catchment. The work will better align policies, objectives, plans, and actions across public bodies, while working collaboratively with stakeholders and communities, with a focus on climate change resilience.

This innovative approach, currently in an early stage of development, has potential to deliver a wide range of environmental and societal benefits including improved climate adaptation, increased nature recovery and biodiversity, and improvements to water quality.

A high-level, long-term programme is currently being shaped by the Place Group with targeted year-one actions and outcomes. Our next steps will focus on using these outputs, together with internal direction, to drive forward our engagement and leadership, particularly in advancing the South Esk initiative. By taking collective action, we aim to deliver cost-effective, landscape-scale outcomes that build resilient natural and organisational systems.

#### Sustainability and synergy at Agnes Husband House

We are now co-locating with Social Security Scotland at Agnes Husband House in Dundee, which provides a modern, energy-conscious workspace that reflects our strong commitment to sustainability and achieving net zero.



Situated within a prime location in Dundee, with excellent public transport links, Agnes Husband House is designed to reduce environmental impact while enabling more collaborative and flexible working. The building includes energy efficient infrastructure, bookable meeting spaces, and hybrid-ready facilities, all supporting low carbon operations and greener commuting options.

Agnes Husband House demonstrates the benefits of co-located public services, reduced overheads, shared innovation, and united focus on environmental responsibility. With sweeping views over the Dundee waterfront and neighbours like the V&A museum, it is a vibrant home for collaboration, creativity, and climate action.

### 4. Transformation

To deliver effectively for Scotland, we need to transform areas of our organisation and embed a customer and delivery focus in everything we do. Doing so will mean we can design and offer better, more resilient services that meet the needs of our customers.

#### Integrated Authorisation Framework (IAF) Update

With the regulation of waste management, water and industrial activities set to move under the Environmental Authorisation (Scotland) Regulations 2018 (EASR) on 1 November 2025, we have now taken a major step forward by launching a new <u>Authorisations and Compliance section</u> on SEPA's Beta website. These pages are designed to help businesses apply for and comply with authorisations under EASR.

This was a major undertaking, with multiple teams across SEPA working collectively over the past 18 months to plan, structure and develop the content. Draft layouts were tested with internal and external users and a structure built that is accessible and easy to navigate. We have written new guidance, updated existing content, and created new application forms. A digital application service will launch in November 2025, to begin to streamline the application process. Publishing the web pages now gives businesses time to prepare and marks the start of a wider programme to support them through the change.

#### **Invest to Save**



We have secured nearly £1 million in funding from the Scottish Government's Invest to Save Fund – a new £29.9m initiative launched in December 2024 to support public service reform. This investment is a major boost to our transformation journey and will help us accelerate smarter, more joined-up regulatory services – a core component of how we are evolving to meet the needs of a changing Scotland. It supports our ambition to:

- Improve access to data and insights.
- Streamline and modernise regulatory processes.
- Deliver better outcomes for the environment and communities we serve.

#### **Environmental Performance Assessment Scheme (EPAS)**

The Environmental Performance Assessment Scheme (EPAS) consultation ran from 31 March to 30 June 2025, supported by an extensive programme of engagement and communications. Through the consultation, we aimed to seek views from businesses, industry leaders, and communities to help ensure the scheme is effective and robust from the beginning.

We received 73 consultation responses, including one written submission, representing a good range of respondents across regulated businesses, trade bodies, and community groups. The consultation feedback indicated broad support for the proposals.

We held an information session for community groups and councillors, which attracted 27 attendees. Two general information sessions were also held which attracted 145 attendees from 117 organisations. Feedback described the sessions as informative, clearly explaining key concepts, and adding value through real-world examples and responsive question and answer sessions. Dedicated information sessions were also held with individual stakeholder groups.

Communications activity was largely focused on social media and SEPA's newsletters. Social content generated around 30,000 social views, while newsletters (direct email and LinkedIn) had approximately 15,000 views/opens. In total, there were approximately 3,500 visits to the online Environmental Performance Assessment Scheme consultation.

A wider report on EPAS will be provided to the Agency Board in September. A consultation document that summarises responses, key themes and priorities and outlines SEPA's intended next steps will be published in mid-autumn 2025.



# 5. Focused on delivery

SEPA is Scotland's principal environmental regulator, and our purpose is to protect and improve Scotland's environment. Our approach to deliver for Scotland focuses on what we do and our corporate plan priorities. We also continue to develop our approaches to communicate and engage effectively with all our customers, the public and communities.



#### Kelp forests protect Scotland's coast from flooding and erosion

Coastal flooding and erosion are becoming more frequent due to higher storm frequencies and intensities, compounded by sea level rise. A multidisciplinary team from Heriot-Watt University carried out the first, large scale modelling of kelp, seagrass, blue mussel and oyster beds, in a <a href="Centre of Expertise for Waters">Centre of Expertise for Waters</a> (CREW) funded project instigated by SEPA. The team constructed advanced models that simulated how each habitat absorbs wave energy in exposed locations prone to coastal flooding. We advised on flood maps and models and ensured modelling mimicked natural ecological conditions.

Predictive models simulated waves under storm conditions. For an area west of the Uists where there are extensive kelp beds, models found potential wave damping by kelp beds up to 70%, and up to 25% off Sanday in northern Orkney. Subtidal seagrass dampens waves to a lesser extent than kelp but still acts to reduce storm surge and provides sediment stabilisation, decreasing coastal erosion.

The study shows that these habitats, particularly kelp, act as important, powerful buffers against storms in low lying coastal communities. Protection of these ecosystems is critical to ensure continued reduction of flood and erosion risk, together with their wider biodiversity and carbon storing functions. Outputs of the report will inform Scotland's next flood risk management plans.





A forest of *Laminaria hyperborea* also known by the common names tangle or cuvie.

Credit: SEPA

#### Multi-agency road stops

Between May and August 2025, we took part in over two weeks of multi-agency road stops in Southwest Scotland, Renfrewshire, Stirling and Falkirk. This work was undertaken in partnership with Police Scotland, His Majesty's Revenue and Customs and Local Authority Colleagues. These types of activities allow partner agencies to work together to proactively detect offences occurring and take the most appropriate action as well as providing a platform to bring awareness of regulatory obligations to a wider audience.

For SEPA, this allowed us to bring awareness to the need for a waste carriers registration for the transport of controlled waste. This partnership activity provided advice and guidance to many businesses with SEPA undertaking further investigation in relation to an unregistered waste carrier transporting controlled waste.

#### ISO 17025 accreditation successfully maintained.

SEPA's laboratories and sampling activities are accredited by UKAS, the National Accreditation Body for the United Kingdom. Following the successful surveillance visit by UKAS earlier this our accreditation to ISO 17025 has been successfully maintained.



Accreditation to ISO 17025 demonstrates the strength and reliability of our scientific evidence. It enhances the credibility of our enforcement actions and environmental assessments, while also ensuring compliance with the Quality Assurance and Quality Control Directive. This accreditation reflects our commitment to maintaining exacting standards of analytical quality and operational integrity.

The UKAS assessment visit was positive, and SEPA was highly commended for the excellent standard of work and our professionalism. UKAS have a high degree of confidence in the work that we do. Our own internal audit process was again highlighted as providing a robust programme of highly detailed audits, which has successfully addressed potential issues in advance, meaning that UKAS doesn't need to. It was also noted that all staff were fully committed to producing quality data, and are highly knowledgeable about the methods, instruments and samples they receive. The next visit from UKAS will be in spring/summer 2026.



#### Scotland's aquaculture website

Scotland's aquaculture website has undergone a major refresh to be more intuitive, informative and accessible than ever before. As one of a number of organisations regulating finfish aquaculture, we play a vital role in protecting the marine environment. Through setting permit conditions, which limit the impacts associated with fish farms, we maintain a high-quality environment and reduce the risks of proposed marine pen fish farm developments to marine species, habitats and other water users.

As well as a more user-friendly design and improved access to interactive maps and datasets, the refreshed site makes aquaculture data generated from regulators and the sector more accessible and meaningful. This reflects our ongoing commitment to transparency and environmental protection, helping stakeholders better understand how SEPA regulates the industry and supports sustainable practices. Take a look: Scotland's aquaculture website.

#### **Back Burn River Restoration Project Starts Construction**

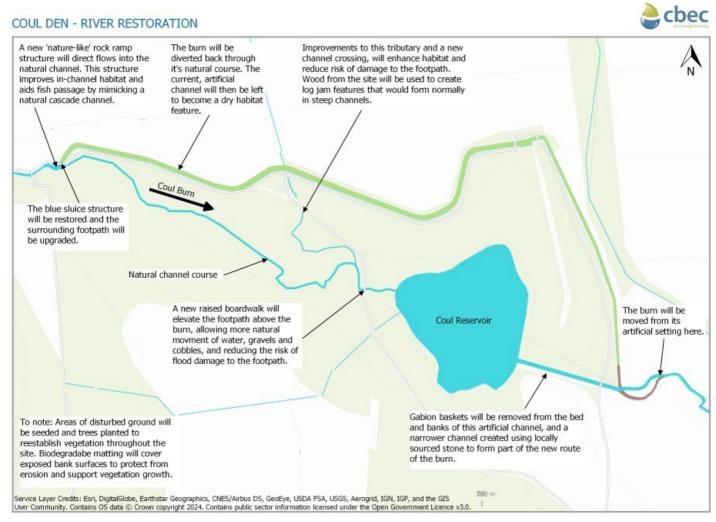
The <u>Back Burn river restoration project</u>, supported by SEPA's Water Environment Fund (WEF), has started construction. The Back Burn has been heavily modified over time, with straightened channels, gabions, and weirs disrupting natural flow and habitats. This ambitious project will restore 5.8 km of river, enhance biodiversity, reduce flood risk through natural flood management and create better spaces for local communities north of Glenrothes and Markinch.

Led in partnership with Fife Council, the project is being delivered by Fife Coast and Countryside Trust (FCCT), with technical design by CBEC eco-engineering and construction by McGowan Environmental Ltd. It forms part of the wider River Leven Programme, which SEPA is proud to support.



The historic blue sluice gate that will be restored as part of the restoration works.

Photo credit: Fife Coast and Countryside Trust.



Restoration works currently taking place at Coul Den.

#### Consultations

Consultation is a vital part of our decision-making process. It allows the public, communities, and stakeholders to share their perspectives and influence our work. This feedback ensures that our decisions are robust, fair, and transparent.

We have noted the successful EPAS consultation previously in this report and recently we have also published a consultation digest for the <u>Fit and Proper Person and Public Participation</u>

<u>Statement consultation</u> related to the Integrated Authorisation Framework (IAF). This document outlines the feedback we received and how it will guide our next steps.

We are also progressing the development of a new Community Engagement and Public Participation Framework, which aims to establish a clear and consistent approach to involving people in shaping our policies and decisions going forward.

#### **SEPA Customer Hub and Business Support**

Across SEPA's Customer Hub and Business Support teams, we are embedding a culture of continuous improvement that directly supports our corporate plan. In Business Support, this means enabling specialists to focus on their professional areas of expertise by transferring appropriate administration and support tasks into our team, freeing up expertise where it has the most impact.

In the Customer Hub, we have introduced monthly call coaching for every team member and are exploring automated quality assurance for every interaction. Our multichannel test-and-learn work is streamlining customer contact from emails, web chat, and calls into a single efficient channel, future-proofed to allow additional customer channels as needs evolve. For the first time, in August, we will publish a dashboard of monthly performance, evidencing outcomes and emerging trends. With our leaner model, we have increased capacity and can now absorb additional work within existing headcount when needed, a capability that positions us well for opportunities ahead.

Some of the changes in progress are already shaping a more connected, more agile service. Others will reveal their full potential over the coming months, as new capabilities come online and data-driven insights start to inform how we work across the organisation.

#### Improving the SEPA website

We are continuing to improve and upgrade the information available on SEPA's website. The new Integrated Authorisation Framework pages are a part of the wider collaborative project to improve the usability of our website. Ongoing improvements are being made to the Beta website, including an improved Regulation homepage to support the launch of the Integrated Authorisation Framework updates.

A new Topics section has been added to replace the Environment tab in the legacy website, which aims to improve the user experience for operators and members of the public, seeking



relevant guidance and information. These are the first of many changes that the content and web teams are working on with the wider organisation to transition from our legacy website to a more effective, accessible and user focused SEPA site.



#### Water Scarcity update

We have been closely monitoring and supporting Scotland through an exceptional period of water scarcity this year. Parts of the east coast have remained at moderate scarcity levels since mid-May, the highest level before regulatory action is required. This prolonged situation stems from a drier-than-normal autumn, winter, and spring, which limited groundwater recharge and snow accumulation. Although summer brought short, intense rainfall, much of it failed to soak in, leaving groundwater deficits unresolved. As a result, some eastern areas recorded their lowest July groundwater levels, increasing river vulnerability if dry conditions persist.

Significant water scarcity was reached for the first time this year on 25 August, with ten river catchments in eastern Scotland now at Significant Water Scarcity, including the Lower Spey, Berwickshire, Upper Don, North Fife, and Lower Tweed. In response, SEPA has issued restrictions on 150 water abstraction licences to date. Considerable preparation has been required across SEPA and with partners to ensure clear messaging, promote resilient water use, and prepare for regulatory action if needed.

From 25 August to 4 September 2025, we have issued five media releases - two general weekly releases and three specific to areas of restriction. There have been 334 pieces of coverage (print, online and broadcast) covering these restrictions – with 228 of those linked to our release on the first restrictions. This included extensive coverage across the UK via national BBC news bulletins on television and radio. Our colleagues carried out eight interviews over the last week of August and first week of September, and 91 pieces of coverage included a quote, soundbite, or interview with a named SEPA spokesperson.

Since April, we have published <u>weekly water scarcity reports</u> highlighting the risks of water scarcity and sharing data, advice, and guidance. All abstractors in affected areas were contacted via our automated messaging system, and over 500 licence holders received direct



calls for tailored support. We have maintained ongoing engagement with National Farmers Union Scotland (NFUS), Scotch Whisky Association, Scottish Golf, Scottish Canals, and worked closely with Scottish Government, Scottish Water, and NatureScot to ensure coordinated communication and action.

We will look to vary irrigation licences ahead of next year to help users plan and manage water more effectively. This forms part of broader work to develop national water resource planning in response to Scotland's changing climate.



#### New flood risk guidance

We have issued new guidance to highlight the risk of flooding to new developments. Flood risk is often underestimated. If development takes place in a medium risk area, although it can have as little as 0.5% chance of flooding in any one year, it has at least a 5% chance of flooding at least once over 10 years, 22% over 50 years and 39% over 100 years. This new context helps developers, planning authorities and other decision makers understand flood risk more clearly and avoid increasing the number of people and properties at risk of flooding.

We have been working closely with the Scottish Government and Heads of Planning Scotland to provide a better understanding of the roles and responsibilities involved in dealing with flood risk as part of the land use planning process. This advice has been incorporated and issued as part of an updated pack of information by the Minister for Public Finance and the Chief Planner. They have written to local authorities and stakeholders to support the application of national planning policy on water and flooding. You can read the <a href="Chief Planner Letter">Chief Planner Letter</a>.





#### **Reykjanes Volcanic Eruption**

With the Reykjanes peninsula in Iceland undergoing a period of heightened activity from 16 July to 5 August 2025, SEPA's <u>Volcanic Emissions Network</u> (VEN)<sup>1</sup> was required to support Scotland's emergency response.

Previous eruptions on the Reykjanes peninsula have impacted Scottish air quality. This was the ninth eruption, and we now have well established procedures in place. Once notified of the eruption by the Met Office, colleagues review available satellite imagery and models, as well as incoming data from the Volcanic Emissions Network and other sources.

Unlike previous eruptions where sulphur dioxide (SO<sub>2</sub>) was recorded, it was Particulate Matter (PM) concentrations that rose. Reactions in the atmosphere had converted the SO<sub>2</sub> released into sulphate particles, creating a volcanic haze or Vog (volcanic smog) over parts of Iceland. Although air quality levels remained within the low banding of the <u>Daily Air Quality Index</u> (DAQI)<sup>2</sup>, we maintained regular communication with Public Health Scotland (PHS), the Met Office and partners at the UK Health Security Agency (UKHSA) throughout, to ensure they were ready to respond should the situation change.



SEPA's Volcanic Emissions Network (VEN) monitoring station at Loch of Strathbeg. Credit: Bryce Syme, SEPA.

<sup>&</sup>lt;sup>2</sup> https://www.scottishairquality.scot/air-quality/daqi



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<sup>&</sup>lt;sup>1</sup> https://www2.sepa.org.uk/volcanicemissionsnetwork/Index.aspx

# 6. Spotlight on...

#### Scottish landfill rate at record low

People in Scotland are generating less waste than ever before and sending less to landfill. The <u>Scottish Waste From All Sources 2023 Official Statistics</u>, published on 15 July 2025 by SEPA, provide details on waste from Scottish households, businesses and public services. SEPA has published this latest report in a new accessible and interactive format for the first time.

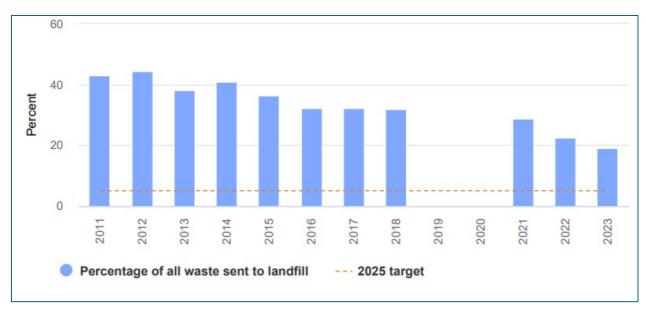
Scotland generated 9.55 million tonnes of waste in 2023 – a 7.5% decrease from 2022 and down 20.2% since 2011. This overall decline reflects a long-term trend towards better waste prevention and reuse across the country.

The amount of waste sent to landfill fell to 1.81 million tonnes, down 21.1% from 2022 to the lowest figure recorded. Scotland's landfill rate now stands at 19%, down from over 40% in 2011, signalling considerable progress in diverting waste away from landfill.

Scotland's Zero Waste Plan was published by Scottish Government in 2010 and set an aspirational target to achieve 5% (maximum) landfill for the total Scottish waste arising by 2025 (see graph on next page). This target was reiterated in Scotland's <u>Circular Economy and Waste Routemap</u> published in 2024 by Scottish Government. The overall recycling rate has remained roughly the same (62.2% down 0.6 percentage points from 2022).

Landfill rates continue to decline as Scotland moves closer to the implementation of a ban on landfilling biodegradable municipal waste (BMW). While positive from a net zero and circular economy perspective, we recognise the impact that reducing landfill tonnage may have on businesses including landfill operators. One of the objectives this year is to ensure key stakeholders, including landfill operators, are engaged and informed on the necessary preparations required for compliance with the BMW Landfill Ban.





Percentage of all waste sent to landfill between 2011-2023 compared to the 2025 target set by Scottish Government.

This report represents an overview of SEPA's delivery activity across the period.

Nicole Paterson, Chief Executive, September 2025.

