



Scottish Environment
Protection Agency

Buidheann Dion
Àrainneachd na h-Alba



Annual Report and Accounts **2015-2016**

SG/2016/89 Laid before the Scottish Parliament by the Cabinet Secretary for the Environment, Climate Change and Land Reform in pursuance of Section 46 of the Environment Act 1995.

The annual accounts are being laid before the Scottish Parliament by the Cabinet Secretary for the Environment, Climate Change and Land Reform in pursuance of Section 22(5) of the Public Finance and Accountability (Scotland) Act 2000.

Alternative languages and formats

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Please send your comments about this report to
performance@sepa.org.uk

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1. Overview

1.1 About us

Our environment provides the natural resources on which our society and economy depends – which is why protecting and improving our environment is absolutely essential. [Scotland's environment](#) generates wealth for Scotland¹, both directly, providing water for the whisky industry and aquaculture, growing crops and timber, and indirectly through tourism and the recreation opportunities afforded by a healthy environment.

We are a non-departmental public body, accountable to Scottish Ministers and the Scottish Parliament, and an independent advisor on the environment. We have 1,251² employees working in 22 offices, giving us a geographical presence across the whole of Scotland, from the Highlands and Islands to the Borders.

Our purpose is to protect and improve the environment in ways that, as far as possible, also help create health and well-being benefits and sustainable economic growth.

We recognise that the context we are working in as an environment protection agency is changing. A fundamental challenge for the 21st century is the over-use of resources and the need to find ways to create social and economic success within planetary constraints. For us, one example of this changing context is that whilst there are still compliance challenges, many of those we regulate are increasingly recognising the value of going beyond compliance. They recognise the positive outcomes that this can bring not just to the environment but to their business and the communities they operate in. We want to work in smarter ways to support this and to play our part in delivering effectively against the Scottish Government's policy agendas, for example, on climate change, circular economy, environmental crime and sustainable flood risk management. This will mean working increasingly in partnership with others.

We will continue to transform our approach, aspiring to deliver world-leading services for the people of Scotland. This will be enabled, in part, by the [Regulatory Reform \(Scotland\) Act 2014](#). We will continue to work closely with Scottish Government through our joint Better Environmental Regulation agenda.

¹ A study valued the benefits provided by Scotland's environment at up to £23.5 billion per year.

Williams E (2009) Preliminary exploration of the use of ecosystem services values in a regulatory context. *Environmental and Resource Economics Project Report for the Scottish Environment Protection Agency*

² As at 31 March 2016

Our Activities

We regulate and advise on a wide range of environmental activities. We help business and industry to understand and comply with their [environmental responsibilities and legislation](#) and have a range of enforcement powers which we can apply to ensure that regulations are complied with.

We take tens of thousands of samples every year from land, water and air, and analyse these in the field and in our laboratories to help assess the quality of our environment.

Our services include: monitoring and reporting on the state of our environment, working with partners to promote sustainable resource use, environmental regulation, responding to environmental emergencies and providing a range of public warning systems, including our flood warning and guidance service and bathing water quality forecasts. We also operate the Radioactive Incident Monitoring Network and the Airborne Hazards Emergency Response service.



FACTS AND FIGURES

16 km

The length of river showing improved physical condition or fish barriers removed through the **Water Environmental Fund** this year (SEPA manages the fund on the Scottish Government's behalf).

↑ 21%

The increase in the number of **Floodline subscribers** during the year compared to 14% the year before.

44%

The percentage of licences that moved from being **non compliant** for two or more years to **compliant** this year.

432,340

The number who viewed SEPA's live flood update web page (on average about 4 times each) between the start of December 2015 and 8 January 2016.



28,495

The number of **environmental samples** we took during the year, meeting 100% of our environmental monitoring plan again.

92,949

The number of calls received by **SEPA Contact Centre** in 2015, compared to 73,119 the year before.



117

The number of major and significant **environmental events** reported to us in the year, all of which we responded to within



100%

We **completed** all the sampling and analysis required in the year under the Urban Waste Waters



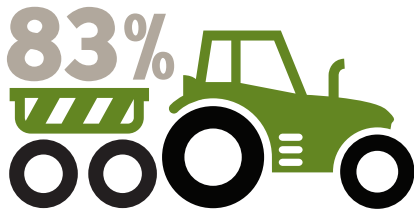
Treatment Directive and the Bathing Water Directive.



80%

Prior to 2016 summer bathing season, the percentage of Scotland's designated bathing waters achieving the new, much stricter, European water quality standards.

FACTS AND FIGURES



The **number of farms** which have started or completed remedial work to prevent diffuse pollution following a visit from SEPA staff.

6

The number of **landfill audits** completed to improve operating practices and reduce greenhouse gas emissions – against 4 audits the year before.



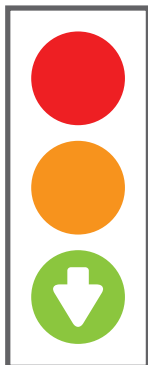
67%

The amount of SEPA's general waste that is **recycled**, well ahead of our Zero Waste target of 50% by 2020.



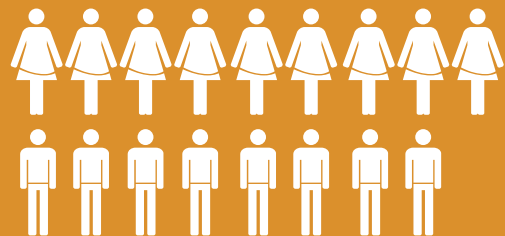
13%

The amount of SEPA's waste that was **sent to landfill**.



6.7%

The fall in **transport greenhouse gas emissions** compared to the previous year.



679/572 (54%/46%)

Female/male employees at the end of March 2016.



The number of senior management posts occupied by **females*** (35% compared with 31% last year)

*There are 65 occupied senior management posts at the end of March 2015 (Grade B or higher).

3.83%*

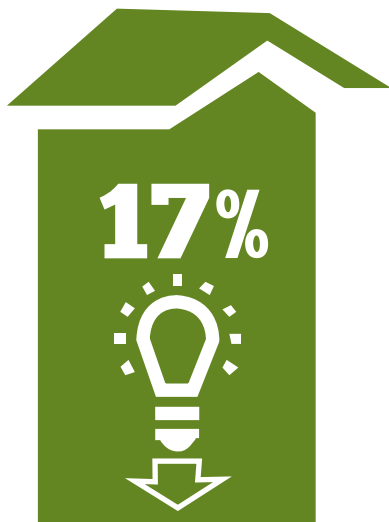
SEPA's **Lost Time Rate** for the year compared with 3.75% last year

*(% of total full-time equivalent working time available that has been lost through absence.)

27

employees declared themselves **disabled**.

FACTS AND FIGURES



The fall in **emissions** from energy use in our buildings compared to the previous year.



The number of planning consultations that were completed on time and or within agreed extensions, equivalent to 96%.

79%

Our Engagement Index score from the latest staff survey, unchanged on the previous survey 2 years ago.



VIBES
AWARDS

89

The number of businesses entering our annual Vision in Business and Environment Scotland (VIBES) award scheme, an increase on 76 the previous year.

1.3 Chair and Chief Executive's Foreword

Welcome to our Annual Report and Accounts for 2015-2016. It has been another year of significant change for SEPA, one which saw both a new Chief Executive and a new Chair, and major milestones reached in establishing SEPA as a world class 21st century environment protection agency, while achieving all 30 of our annual performance targets. The structure of our Annual Report and Accounts has changed too, covering not only our business and financial performance but also our sustainability performance and our reporting under the Scottish Regulators' Strategic Code of Practice.



Meeting all 30 of our performance targets is a strong achievement during a challenging period. We are particularly pleased to be able to report improvements in reducing operator non-compliance, the successful publication of Scotland's Flood Risk Management Strategies and the launch of the Solway Flood Warning Scheme, publication of Scotland's Second River Basin Management Plans, implementation of our new Landfill Tax and preparation for reservoir safety responsibilities, and increased entries for the Vision in Business and Environment Scotland (VIBES) awards. We are also pleased to have met all our targets for environmental monitoring and reporting, flood warnings, and responding to environmental incidents. In addition, we launched a schools' air quality teaching package, won awards for our NetRegs service and hydropower best practice guide, consulted on a new enforcement policy and charging scheme, launched the Centre for Sustainable Practice and Living in partnership with the University of Stirling, and officially opened our new Stirling office.

We have reported before on our programme of organisational improvements to establish SEPA as a world-class environment protection agency fit for the challenges and opportunities of the 21st century, and this year saw significant progress on that journey. The challenges of the 20th century were effectively to stop extreme pollution of our environment, and in that we have been largely successful. The challenge of the 21st century is to begin to reduce the demands we make of our natural resources and systems - from the three planets' worth our lifestyles currently require, towards the sustainability of using just the one planet, which is all we have. Achieving this will require new perspectives, new approaches, and new partnerships; not just to ensure businesses achieve compliance with regulations, but to help them go beyond compliance to realise the benefits of even better environmental performance; and helping people see, and make the most of, the positive connections between a healthy environment, a healthy economy, and human health and well-being.

The Scottish Government has provided us with a clear purpose - to protect and improve the environment in ways that, as far as possible, also help create health and well-being benefits and sustainable economic growth. This unique purpose allows us the flexibility to develop new and innovative ways to achieve real and lasting benefits for the people of Scotland. This year we set out six Organisational Characteristics which will define our approach in future. We have also been developing our strategic outcomes, for inclusion in our next corporate plan, so we can be both transparent and accountable about what we want to do and achieve. Delivering on these outcomes will require new processes, new skills and new roles, and we have made significant progress in all these areas over the past year, while continuing to deliver

successfully on all our existing commitments. Over the coming year, for example, we will increasingly engage with business owners and Boards to drive improved environmental performance; tackle environmental crime to ensure a level playing field for legitimate business; develop a new regulatory framework which is simpler, joined-up and based on clear outcomes; and use our new enforcement powers to help secure full compliance with environmental regulations.



Bob Downes
Chair



Terry A'Hearn
Chief Executive

Ro-ràdh a' Chathraiche is an Àrd-Oifigeir

Fàilte gu ar n-aithisg bhliadhnail airson 2015-2016. Tha i air a bhith na bliadhna eile de atharrachadh susbainteach air SEPA, a thug a-steach Àrd-Oifigear ùr agus Cathraiche ùr, agus anns an deach prìomh chlachan-mìle a choileanadh le bhith a' stèidheachadh SEPA mar bhuidheann dìon àrainneachd ainmeil air feadh na cruinne san 21mh linn, agus cuideachd a' coileanadh a h-uile gin de na 30 targaidean buileachaidh bliadhnail againn. Tha structar ar n-aithisg bhliadhnail air atharrachadh cuideachd, a' toirt a-steach chan e a-mhàin ar buileachadh gnìomhachais is ionmhais ach cuideachd ar buileachaidh seasmhachd agus ar n-aithris air Còd Cleachdaidh Ro-innleachail Riaghladairean na h-Alba.



Is e coileanadh làidir a th'ann a bhith a' coinneachadh ris a h-uile tè de na 30 targaidean buileachaidh againn aig àm a bha gu math dùbhlach. Tha sinn gu sònraichte toilichte gun urrainn dhuinn aithris gun rinn sinn adhartasan ann a bhith a' lughdachadh ìre neo-ghèillidh ghnìomhaichean, gun deach ro-innleachdan Riaghladh Chunnart Thuiltean na h-Alba fhoillseachadh gu soirbheachail agus gun deach Sgeama Rabhaidh Thuiltean Shalmhaigh a chuir air bhog, gun deach An Dàrna Plana Riaghlaidh Srath-aibhne na h-Alba fhoillseachadh, gun deach a' Chis Òtraich agus na dleastanasan sàbhailteachd ionad-tasgaidh ùr againn a thoirt gu buil, agus gun d' fhuarar barrachd thagraidhean airson duaisean Sealladh ann an Gnìomhachas is Àrainneachd na h-Alba (VIBES). Tha sinn cuideachd toilichte gun choilean sinn a h-uile targaid againn airson dearcnachadh agus aithris àrainneachdail, rabhaidhean thuiltean, agus a' dèiligeadh ri tachartasan àrainneachdail. A bharrachd air an sin, chuir sinn pasgan càileachd teagaisg àile air bhog airson sgoiltean, choisinn sinn duaisean airson ar seirbheis NetRegs agus iùil sàr-chleachdaidh cumhachd dealan-uisge, chum sinn co-chomhairle air poileasaidh sparraidh agus sgeama chisean ùr, chuir sinn an Ionad Cleachdaidh is Beatha Seasmhach air bhog ann an co-bhonn ri Oilthigh Shruighlea, agus dh'fhosgail sinn ar n-oifis ùr ann an Sruighlea gu h-oifigeil.

Rinn sinn aithris roimhe seo air ar prògram mu adhartasan buidhneil airson SEPA a stèidheachadh mar bhuidheann dìon àrainneachd le inbhe cruinneil a tha deiseil airson dùbhlannan is cothroman na 21mh linn, agus am-bliadhna rinn sinn fìor adhartas air an t-slighe sin. B' e na dùbhlannan san 20mh linn a bhith a' cur stad air droch thruailleadh san àrainneachd againn, agus tha sinn air a bhith gu ìre mhòr soirbheachail a' dèanamh sin. Is e dùbhlann na 21mh linn tòiseachadh air na h-iarrtasan a bhios againn mu ar goireasan agus siostaman nàdarra a lughdachadh – bho luach nan trì planaidean a tha ar cleachdaidhean-beatha gnàthach a' feumachdainn, a dh' ionnsaigh seasmhachd de bhith a' cleachdadh dìreach an aon phlanaid, leis nach eil againn ach sin fhèin. Feumaidh seallaidhean ùra, modhan-obrach ùra agus com-pàirteachasan ùra a bhith againn gus sin a choileanadh; chan ann dìreach gus dèanamh cinnteach gum bi gnìomhachasan a' cur riaghailtean an gnìomh, ach gus an cuideachadh a dhol nas fhaide na coileanadh airson buannachd fhaighinn bho buileachadh àrainneachdail nas fheàrr; agus a' cuideachadh dhaoine gu bhith a' faicinn, agus a' dèanamh an fheum as fheàrr, bho na ceanglaichean adhartach eadar àrainneachd fhallain, eaconamaidh fhallain, agus slàinte agus sunnd daonna.

Tha Riaghaltas na h-Alba air adhbhar soilleir a thoirt dhuinn – an àrainneachd a dhìon agus adhartachadh ann an dòighean a bhios, cho fada sa tha sin comasach, cuideachd a'cuideachadh le bhith a' cruthachadh buannachdan slàinte is sunnd agus fàs seasmhach san eaconamaidh. Bheir an adhbhar sònraichte seo sùbailteachd dhuinn gu bhith a' leasachadh dhòighean ùra agus ùr-ghnàthaichte gu bhith a' coileanadh bhuannachdan fìor-mhath agus seasmhach airson muinntir na h-Alba. Am-bliadhna stèidhich sinn sia Feartan Buidhneil a dhearbhas ar modh-obrach san àm ri teachd. Tha sinn cuideachd air a bhith a' leasachadh ar builean ro-innleachdail, airson a dhol san ath phlana corporra againn, gus am bi sinn gach cuid soilleir agus cunntachail a thaobh na tha sinn ag iarraidh a dhèanamh agus a choileanadh. Bidh feum air pròiseasan ùra, sgilean ùra agus dleastanasan ùra airson nan toraidhean sin a libhrigeadh, agus tha sinn air fìor adhartas a dhèanamh anns na rointean sin air fad thairis air a' bhliadhna a dh'fhalbh, agus aig an aon àm a' libhrigeadh gach fear de na geallaidhean gnàthaichte againn gu soirbheachail. Thairis air a' bhliadhna ri thighinn, mar eisimpleir, bidh sinn nas motha an sàs le luchd-seilbh gnìomhachasan agus Bùird gus buileachadh àrainneachdail nas motha a stiùireadh; a' dèiligeadh ri eucoir àrainneachdail gus dèanamh cinnteach gu bheil gnìomhachasan ceart air an làimhseachadh gu cothromach; a' leasachadh frèam-obrach riaghlaidh ùr a bhios nas simplidhe, nas ceangailte agus stèidhichte air toraidhean soilleir; agus a' cleachdadh nan cumhachdan sparraidh ùr againn gus a bhith a' cuideachadh le bhith dèanamh cinnteach gum bithear a' toirt làn ghèilleadh do riaghailtean àrainneachdail.

Ma tha thu airson gun tèid barrachd den aithisg seo eadar-theangachadh gu Gàidhlig feuch an cuir thu fios gu SEPA agus beachdaichidh sinn air an iarrtas agad a-rèir nan cosgaisean a bhios na chois.



Bob Downes
Chair



Terry A'Hearn
Chief Executive

Review of the year 2015-2016

The review of the year illustrates the breadth and diversity of our role. It includes activities which require careful planning, and others which demonstrate our ability to respond to opportunities and unforeseen events.



Implementation of the Reservoirs (Scotland) Act 2011

We started registration of existing regulated reservoirs on 1 April, in advance of us taking over responsibility from local authorities for the regulation of Scotland's reservoirs (over 25,000m³) exactly a year later. Registration was free until the end of September. Alongside this, in line with a key part of the [Scottish Regulators' Strategic Code of Practice](#), we began an eight-week consultation on our [proposed reservoirs charging scheme](#). The scheme also received an independent review. By October we had made the public register of regulated reservoirs available on our [website](#), as well as the related inundation maps. These show the potential flooded area in the event of an uncontrolled release of water.



Official opening of Strathallan House by Minister

Dr Aileen McLeod, Minister for Environment, Climate Change and Land Reform, opened our modern refurbished [shared office in Stirling](#). This followed a phased exit from our two offices on the business park, with the last staff arriving in February 2015. We share the building with Scottish Natural Heritage with whom we have many shared interests. This supports the Scottish Government's drive for public bodies to achieve efficiency savings by sharing facilities. As part of the biodiversity drive across the SEPA estate, we celebrated our first summer at Strathallan with a dramatic display of wild flowers, funded by a donation from our previous Chief Executive, James Curran.



Making the case for soils

At the Royal Highland Show we [linked](#) the Year of Food and Drink in Scotland with the [International Year of Soils](#). We demonstrated how soil quality was critical for food production, water quality, flood risk, climate change mitigation and adaption, as well as supporting diverse habitats and species. We participated in an educational "SoilsTrail" launched at the Show. Over 800 followed the trail to our partners' stands hosting cut-out Soil Characters, answering clues about Scotland's different soil types. We issued a special soils-themed [SEPA View](#), explaining their importance and our involvement in soil protection. Earlier in the year we issued a [soil video](#) series and assisted the provision of more detailed soils information on [Scotland's Environment Web](#).



Consultation opens on SEPA's revised enforcement policy

Stakeholders had until the end of October to provide comment on our proposed new enforcement policy and guidance. This final consultation followed consultations in 2012 and 2014 that led to additional enforcement powers being granted to us under the [Regulatory Reform \(Scotland\) Act 2014](#). These new enforcement measures came into force after the [Environmental Regulation \(Enforcement Measures\) \(Scotland\) Order 2015](#) was laid before the Scottish Parliament in September. The overall aim of the new enforcement measures is to deter and discourage offending by punishing those who damage the environment and undermine legitimate businesses in Scotland. We will use these [new measures](#) from summer 2016.



Formal launch of schools' air quality package

Final preparations were made prior to the launch of our [air quality teaching package](#). [Learn about Air Quality](#) at the Scottish Learning Festival in Glasgow. Created in partnership with North Lanarkshire Council and Education Scotland and backed by low cost sensors developed by Edinburgh University, the package was tested through pilot schools in Lanarkshire and Glasgow. The sensors gather air quality data at key locations around schools, automatically sending it to [Scotland's Environment website](#) where charts illustrate how levels of pollution vary through the day. The information presented in the package encourages pupils to consider ways to improve local air quality by changing behaviours such as how they travel to school.



Consultation on new charging scheme closes

The [consultation](#) on the proposed new charging scheme for regulated activities closed on 17 September. This was a key part of the Better Environmental Regulation programme. We wrote to every operator providing access to an internet tool that gave details on how charges were calculated for each licence, and changes phased in over five years. The charging scheme was revised taking into account feedback from 11 stakeholder workshops and eighty-three formal consultation responses. It was approved by the Scottish Ministers in February, coming into effect on 1 April. [The Environmental Regulation \(Scotland\) Charging Scheme 2016](#) has replaced five previous schemes with a single risk-based scheme.



October

Minister launches the Solway Firth Flood Warning Scheme

A new coastal flood warning service for communities at risk along the Solway Firth was launched by the Minister for the Environment, Climate Change and Land Reform, Dr Aileen McLeod, in Dumfries & Galloway. We worked closely with Dumfries & Galloway Council to design the new scheme, which stretches from [Loch Ryan to Gretna](#) and also covers major roads in the region. The scheme benefits over 1,400 properties within 12 Flood Warning Areas. All residents were directly contacted to encourage them to sign up to [Floodline](#). This latest scheme contributes towards fulfilling our five-year Flood Warning Strategy, which made strategic commitments to reduce the impact of flooding, especially through timely flood warnings.



November

NetRegs pulls in the prizes

[NetRegs](#) is a website we manage providing environmental guidance for businesses in Northern Ireland and Scotland. This year its own contribution to protecting the environment was recognised through a series of awards. Early in the year NetRegs won the top Scottish Green Apple Award in the campaign to find Scotland's greenest companies, councils and communities. NetRegs went on to receive a gold award at the UK level, at a presentation in the Houses of Parliament on 16 November. In the same month NetRegs was presented with a European award in Maastricht, one of only two successful UK projects that entered the [2015 European Public Sector Awards](#).



December

Hydro best practice guide wins high profile environment prize

While hydropower schemes are a major renewable energy contributor, their construction can cause pollution downstream. As well as obtaining permission from the local planning authority, operators need an [environmental licence](#) from SEPA to ensure over-abstraction of water and other environmental risks are addressed. To assist the hydropower industry through the construction phase we collaborated with Scottish Renewables and Scottish Natural Heritage to develop a comprehensive guide. The publication "[Guide to hydropower construction best practice](#)" was awarded the [Sustainable Development Award](#) at December's Scottish Green Energy Awards in Edinburgh. The publication provides a "one-stop-shop" guidance on the likely environmental risks faced by contractors, with many links to related "good practice" documents.



January

SEPA's Board welcomes a new chair

Following the retirement of David Sigsworth at the end of 2015, Scottish Ministers confirmed the appointment of Bob Downes as his successor. Bob has been a member of the Board since 2008, and Deputy Chair since 2012, as well as chairing the Audit Committee since 2010. Bob brings a wealth of experience from the private, public and voluntary sectors, and has been instrumental in developing SEPA's ambitious vision and plans for the future. David Sigsworth had served two four-year terms and in his last month attended a presentation with the staff at Strathallan House at which he described some of the significant achievements he had witnessed as Chair.



February

Second river basin management plans published

The second [River Basin Management Plan](#) for the Solway Tweed river basin district was published. Building on the first river basin management plan published in 2009, the new plan outlines a strengthened programme designed to improve progressively the condition of our water environment. Together with the second [River Basin Management Plan for the Scotland river basin district](#), published in December, the plan sets out objectives for the next 12 years and actions required to tackle the pressures facing the water environment. Both plans are supported by SEPA's new [Water environment hub](#), an online interactive tool providing detailed information on current status, objectives and measures.



March

New waste tyre regulations introduced

Tough new licensing rules, which will help us crack down on illegitimate waste tyre operators, came into effect. All operators who store or process waste tyres will now be required to hold the appropriate [waste licence](#). Exemptions will no longer be valid beyond September, meaning that those who could previously store up to 1,000 waste tyres on a site will now have to apply for a licence, or remove all tyres to a licensed facility. This should discourage illegitimate waste tyre operators undercutting those who are fully compliant with the rules. Offenders will face a maximum fine of £40,000 and six months' imprisonment.

1.5 Creating Opportunities for All of Scotland to Flourish

The purpose of the Scottish Government is to focus government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth. SEPA is responsible for ensuring the high quality environment which is vital for the health and well-being of our communities as well as for sustainable economic growth. Much of Scotland's economy, such as the established industries of tourism, agriculture, and the food and drinks sector, depends on Scotland's high quality air, land and water. We also work in partnership with the public and private sector providing advice and support to facilitate sustainable development.

To support its purpose, the Scottish Government has identified seven purpose targets and 16 national outcomes. We make a contribution to the nine national outcomes shown below. More information about how we contribute to the Scottish Government's purpose can be found in our *Corporate Plan 2012-2017* (updated 2014) and in the statement 'Promoting and increasing sustainable growth' on our [website](#).



1.6 Our Purpose, Outcomes and Organisational Characteristics

Our Purpose

Our purpose is to protect and improve the environment in ways that, as far as possible, also help create health and well-being benefits and sustainable economic growth.

Our Outcomes

There are four outcomes we set out to achieve in the [Corporate Plan 2012-2017 \(updated 2014\)](#). This Annual Report and Accounts covers the penultimate year of the five year plan. For each of these outcomes we drew up a series of broad performance targets. Each year we present in our Annual Operating Plan a list of more specific performance measure. These are used during the year to monitor and report on our performance against the targets in the Annual Operating Plan. The [2015-2016 Annual Operating Plan](#) contained 30 such measures, which are summarised in the Performance scorecard on page 15.

The four outcomes are:

- Scotland's environment is protected and improving
- Scotland's environment is understood and SEPA is a respected and influential authority
- Scotland is preparing for a sustainable future and is taking steps to limit climate change
- SEPA is a high performance organisation

Our Organisational Characteristics

Our aim is to ensure that everything we do is designed to deliver our statutory purpose in the most effective ways possible. Our first step has been to design six Organisational Characteristics.

These will be the fundamental characteristics of SEPA in the future. They will be at the core of our next corporate strategy and help us make day-to-day and longer-term decisions. They describe who we want to be and the way we will work to deliver against our statutory purpose.

Our Six Organisational Characteristics

In 2020, we will be:

- 1. Producing information and evidence that people use to make decisions.**
As environmental issues become more central to health, well-being and sustainable economic growth, environmental information should be more needed to make decisions that achieve all three objectives. If our information and evidence is top quality, people will use it in their decision-making; it will not just 'raise awareness'.
- 2. Helping people implement successful innovation, not minor improvements on 'business-as-usual'.**
In a world of growing population, urbanisation, inequality, climate change and other systemic challenges, small incremental change is important, but not sufficient to generate improvements in environment, health and well-being and sustainable economic growth. Societies constantly innovating will best rise to these challenges. We will help people to innovate in ways that create success in all three objectives.
- 3. Helping communities see the environment as an opportunity to create social and economic success.**
For too long, too many people have viewed environmental, social and economic success as being in conflict. We will help change this 'mind-set'. We will constantly seek to understand the health and well-being and sustainable economic growth outcomes that communities are trying to create. We will find new ways to support communities to participate in decisions and help them pursue their shared purpose.
- 4. Routinely interacting with regulated businesses through their Boardrooms, Executive teams and Owners.**
The major decisions in a business get made at Board, Executive and Owner level. Compliance is non-negotiable and the minimum expected of everyone. If we are to ensure businesses achieve compliance quickly and at low cost and help businesses create sustainable economic growth, we need to understand their commercial context to create as much alignment as possible between environmental and economic goals. We need to help businesses turn environmental management from a cost centre into a profit driver. This means interacting more at senior levels.
- 5. An organisation that people are clamouring to work for.**
Talented people want to work for organisations that achieve great outcomes and deliver powerful results to their customers. Our existing staff will want to stay with SEPA and new people will want to join SEPA because we give them the clarity and confidence to use their skills to deliver great outcomes for the people of Scotland.
- 6. Using partnerships as our principal way of delivering outcomes.**
The challenges of achieving progress across the three objectives are so large and so inter-connected that most solutions in the 21st Century will come through partnership working. We will strive to do as much of our work as possible through partnerships. In many cases, we will not be the 'lead partner'. We will be an organisation known for contributing to the co-production of outcomes.

1.7 Financial Summary

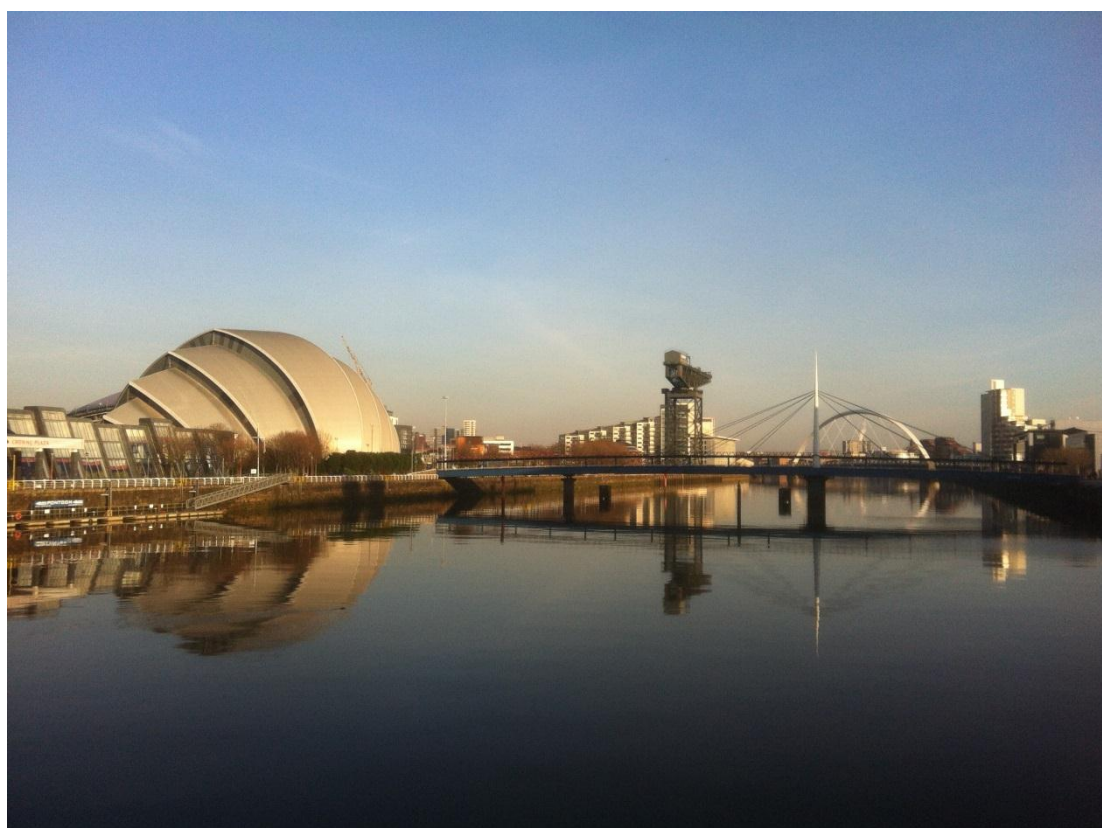
In 2015-2016 we received:

- £35,378,000 Grant in Aid from the Scottish Government
- £37,391,000 in fees from business and industry for activities related to regulation
- £486,000 grant from LIFE+³
- £5,242,000 other income⁴

This was used to fund operating costs of £ 84,861,000 and capital investments of £1,706,000.

The Scottish Government set SEPA a budget limit for the year of £40,098,000. We incurred £40,087,000 expenditure against this limit, which was an underspend of £11,000.

A more detailed finance report is provided in the annual accounts section of this report on page 80.



³ The LIFE+ programme is the European Union's funding instrument for the environment.

⁴ This includes all other income such as the income we get for administering grants under river restoration and work we do for the Environment Agency.

1.8 Performance Summary - Performance Scorecard

Our [Annual Operating Plan 2015–2016](#) identified 30 performance measures which we monitored throughout the year to assess progress towards our four outcomes (see page 12). We achieved all 30 of our performance targets, details of which are included throughout this report. Further detail can also be found in our [Annual Review of Performance 2015–2016](#).

		Target	Status	Page
Scotland's environment is protected and improving				
01	Improving Poor Performers	20%	✓	16
02	Decreasing Non-Compliance	10%	✓	17
03	Water Environment	31/03/2016	✓	21
04	Second River Basin Management Plans	22/12/2016	✓	24
05	Radioactive Waste Disposals	1millisievert	✓	25
06	Flood Risk Management Strategies	22/12/2016	✓	26
07	Solway Flood Warning Scheme	31/03/2016	✓	28
	Maintain operational readiness of our public warning and incident response systems:			
08	Radioactive Incident Monitoring Network	100%	✓	29
09	Air Hazard Emergency Response Service	100%	✓	29
10	Bathing Water Data	100%	✓	30
11	Daily Flood Guidance	100%	✓	31
12	Flood Warning	98%	✓	33
Scotland's environment is understood and SEPA is an influential and respected authority				
13	Reporting Requirements	100%	✓	34
14	Citizen Science – Project Finder	50%	✓	35
15	Environmental Monitoring Plan	95%	✓	36
16	Statutory Monitoring Requirements	100%	✓	37
17	VIBES awards	77	✓	38
Scotland is preparing for a sustainable future and is taking steps to limit climate change				
18	Landfill Tax	31/03/2016	✓	39
19	Landfill Audits	4	✓	41
SEPA is a high performance organisation				
20	Corporate Greenhouse Gas Emissions	31/03/16	✓	42
21	Zero Waste Targets	85%	✓	45
22	Organisational Efficiencies	3%	✓	48
23	Cost Recovery	99%	✓	48
24	Licence Determination	96%	✓	49
25	Environmental Incident Reports	96%	✓	49
26	Major and Significant Environmental Events	12 hours	✓	50
27	Development Plans and SEA Consultations	100%	✓	50
28	Planning Consultations	95%	✓	51
29	Official and Ministerial Enquiries and Third Party Consultations	90%	✓	52
30	Maintain High Levels of Staff Engagement	75%	✓	54

Key – Target Achieved ✓

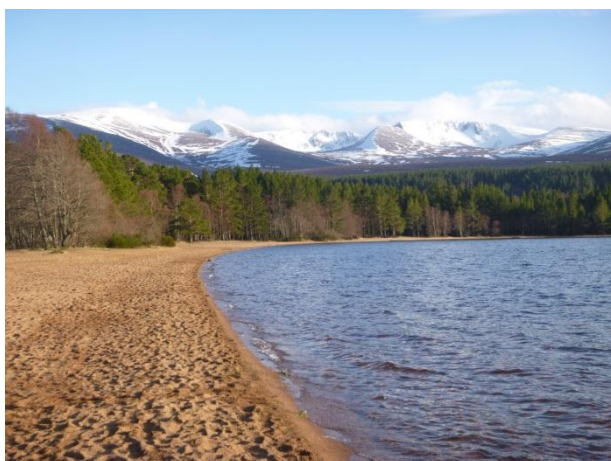
2. Performance Analysis

Introduction

Our [2012-2017 Corporate Plan](#) set out four broad outcomes we set to achieve and broad performance targets for each. Each year our Annual Operating Plan draws up a list of more specific performance measures. Last year's [Annual Operating Plan 2015-2016](#) described our priorities for the year and the 30 performance measures we would use to monitor our success in meeting these priorities. Each measure has a performance record table drawn up at the start of the year to define clearly what is required to achieve the target. Over the year we have met all of the 30 targets.

This review of our performance explains each of our performance measures and summarises our performance over the year. As well as showing how we met the target this year, where relevant we also indicate whether the target was achieved in previous years. A more detailed review of our performance has been published already on our website under the title of "[Annual Review of Performance 2015-2016](#)".

During the year the Agency Management Team receive monthly updates on performance. Quarterly performance reports are produced for the Agency Management Team, the Board and the Scottish Government, and these are then made available on our [website](#).



1. Improving Poor Performers

Improve compliance with licence conditions for at least 20% of the 395 licences for regulated sites which were assessed as non-compliant for 2013.

What difference have we made?

We have made sure that businesses respect Scotland's environment

We work to minimise the impact on the environment from operators and sites that we regulate. To assist us we monitor the compliance of operators and sites with the conditions included in their licences that we issue under environmental legislation. We use a range of tools to improve operators' compliance with environmental regulation, from providing advice and guidance to targeting specific harms and enforcement.

This measure lets us know whether the steps we are taking to improve compliance are having the desired effect and to assess whether or not compliance with licence conditions improves for 20% or more of the licences identified as non-compliant during 2013-2014.

In March 2014 395 licences were assessed as non-compliant for the compliance year to December 2013. At the end of the 2014 assessment year 154 of these 395 failing sites were still non-compliant. To achieve this target we needed to turn 20% of these to compliant during the year (i.e. at least 31, which is 20% of 154 above).

Over the year 44% of those 154 licences remaining non-compliant after two or more years had become compliant, against the 20% target. Two licences have not been assessed. Of those two, one has been revoked and one has been surrendered.

Status	Total
Moved to Compliant	68
Not Assessed	2
Still Non-Compliant	84
TOTAL	154

Source: Compliance Assessment Scheme as at 10 May 2016

2. Decreasing Non-Compliance

Achieve a 10% decrease in the percentage of regulated sites which are identified as non-compliant in 2015 compared to 2014.

What difference have we made?

We have made sure that businesses respect Scotland's environment

The purpose of this measure is to show whether the steps we are taking to improve compliance are reducing longer-term levels of non-compliance. The target was to reduce the non-compliance rate by a tenth from the previous year. The non-compliance rate in 2014-2015 was 12% (639 non-compliant licences) and the target for 2015-2016 was 10.8% (12% reduced by a tenth).

The target was achieved as the non-compliance rate at the end of the year was better, at 9.7% than the target of 10.8%.

SEPA has a formal compliance assessment scheme that assesses a combination of factors against every condition within an authorised permit. These factors are:

- the results of site inspections;
- operator data returns;
- desk based assessments;
- information concerning environmental incidents.

These factors identify whether an operator has complied with the permit's conditions. The annual measurement of compliance is carried out from January to December. For a site to be non-compliant the operator only has to fail one or more conditions detailed in their permit. These conditions can range from air emission levels, waste storage volumes or levels of substances discharged to water courses. They also include management conditions such as the requirement to have copies of permits or documented training records available.

Status	Total
Compliant	4,936
Failing	532
TOTAL	5,468

Source: Compliance Assessment Scheme as at 14 June 2016

Not every unsatisfactory compliance assessment will have a direct or immediate impact on the environment and we use a risk based approach to inspections. This allows us to target higher risk sites for more frequent inspections which means that low risk sites are not necessarily assessed every year. To that end, we use a percentage failure rate for the target as the number of assessments changes each year.

We are aiming to make a considerable revision to the compliance assessment scheme ready for launch in January 2017. One of the benefits of the changes will be a rolling assessment process that will give real-time compliance data, rather than the current reliance on end-of-year assessment. This data will be available on the website within four months of assessment, using publicity as a driver towards gaining improved levels of compliance.

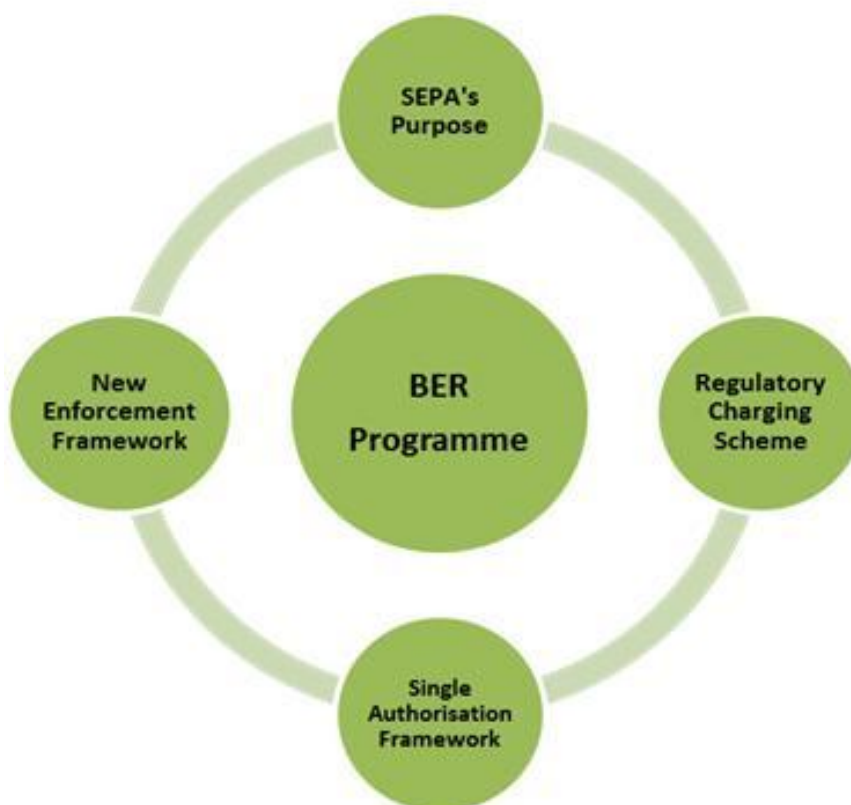
The new compliance assessment scheme will also be linked to the charging scheme in 2018, enabling us to use financial penalties to encourage compliance. We will also use our new enforcement powers provided by the [Regulatory Reform \(Scotland\) Act 2014](#) to target persistent non-compliant sites and sites that fail to submit data returns. At the same time we will continue to work with our partners to drive down levels of non-compliance.



Scottish Regulators' Code of Practice

The [Regulatory Reform \(Scotland\) Act 2014](#) included powers for Scottish Ministers to issue a code of practice for regulators. SEPA was included on the working group consisting of representatives from regulators and business to draw up the [Scottish Regulators' Code of Practice](#). This was laid before the Scottish Parliament in January 2015 and gained approval on 18 February 2015. We are committed to follow the five main principles of better regulation as described in the Code: regulation should be transparent, accountable, consistent, proportionate and targeted only where needed. This has been reflected in the extent of consultation we have consistently carried out, or are planning to carry out with our stakeholders, in relation to the four main stages in the Better Environmental Regulation programme, shown in the diagram on the next page.

Better Environmental Regulation Programme – The Four Main Steps



We have been working in partnership with the Scottish Government to develop and deliver the [Better Environmental Regulation](#) programme. The overall aim of the programme is to simplify environmental legislation so that we are able to identify, and focus effort on, the most important environmental risks and harms. Regulated businesses also stand to gain as the efficiency and effectiveness of our service improves. They will also benefit from us fulfilling the main principles of Better Environmental Regulation, for example being proportionate, consistent – and timely, in terms of our enforcement actions. Tackling serial offenders, and clamping down on environmental crime more swiftly and directly, benefits legitimate operators by driving up compliance and levelling the playing field.

Regulatory Reform - SEPA's new charging scheme for 2016-2017

After a series of consultations, the last one finishing in September 2015, the [new charging scheme](#) was launched in April 2016. Significant changes were made in response to comments received from these [consultations](#). The new charging scheme replaced five existing schemes covering waste, pollution prevention and control, radioactive substances, water discharges and water abstractions / impoundments. It is not intended to raise new sources of income from existing work, but aims to increase the effectiveness of cost recovery and to allocate charges fairly between operators and sectors. In summary the new charging scheme:

- covers 90% of SEPA's chargeable income;
- will ultimately encourage operators to improve their compliance;
- incentivises reductions in emissions, abstractions or waste disposal.

The new scheme has three main components which will determine the annual charges paid by operators:

1. An activity component – which recovers our costs for regulating sites and activities.
2. An environmental component – which recovers our indirect costs, such as environmental monitoring from the larger activities which have the greatest potential for affecting the environment. The charge is made in proportion to the scale of the pollution released, water abstracted or retained, and waste throughput. Operators that reduce the level of pollution will see their charges reduced.
3. A compliance factor – this will come into effect in 2018-2019 and will increase charges for those not complying with their licence conditions.

The increases or decreases in charges will be phased in over five years. The charging scheme will be reviewed in 2017-2018, and periodically thereafter, to ensure it remains up-to-date and that charges are cost-effective.

As indicated in our [2016-2017 Annual Operating Plan](#), the charging scheme income forecast for 2016-17 is £39.8million.

Regulatory Reform - SEPA's New Enforcement Measures

Various rounds of consultation have also taken place over our new enforcement measures granted under the Regulatory Reform (Scotland) Act 2014, the last one ending in October 2015. Phased implementation of the [new enforcement measures](#), such as fixed and variable monetary penalties, start in June 2016, working alongside our existing enforcement tools (i.e. advice and guidance, final warning letters, enforcement notices and reports to the Procurator Fiscal). Overall, the new [enforcement measures](#) will:

- Enable us to take more proportionate and flexible enforcement action focussed on changing behaviours.
- Support a preventative approach that deters non-compliance and tackles illegal activities more effectively.
- Prevent escalation and offending dragging on.
- Complement the use of existing enforcement actions whilst ensuring significant, persistent and deliberate offending will be referred to the Crown Office and Procurator Fiscal Service.

Regulatory Reform - Single Authorisation Framework

We are approaching consultation on the final part of the programme, the Single Authorisation Framework. This will bring together all the permissioning arrangements ([licence application process](#)) for the regulation of water, waste, radioactive substance and Pollution Prevention and Control into a single permissioning structure and under a single standardised procedure. Consultation is due in summer 2016 with the aim to implement the single authorisation framework from winter 2017.

3. Water Environment

Deliver specific work which will contribute to the objectives of the first River Basin Management Plans and deliver improvements in the water environment, including the problem-solving project for diffuse pollution.

What difference have we made?

We have improved the quality of Scotland's water

We help protect and improve Scotland's wetlands, rivers, lochs, estuaries, coastal waters and groundwater through regulation, monitoring and planning. We are the competent authority for the delivery of Scottish Ministers' objectives set out in the River Basin Management Plans for the Scotland and Solway-Tweed river basin districts. These provide the means to deliver improvements in Scotland's water environment.

Five key work-streams contributing to improving the water environment (as directed by the first River Basin Management Plan) were monitored throughout the year to assess performance. The target was achieved.

While there have been some delays in the [Quality & Standards](#) and [Controlled Activities Regulations](#) review work-streams, these are being managed and do not justify an overall failure for this very large and wide ranging performance measure. In addition, the publication of the second [River Basin Management Plans](#) this year has revised the water environment objectives for the next two cycles up to 2027.

1. Controlled Activities Regulations licence reviews

As a regulator we use license reviews to secure environmental improvements where required.

These reviews have progressed as planned this year with the exception of the three programmed hydro sector reviews. However there has been significant progress in this area in recent months. After recent meetings with the sector and the Fisheries Board there is now an agreed way forward for the River Garry system, which will enable a decision on the required flows for the Lower Garry early in 2017.

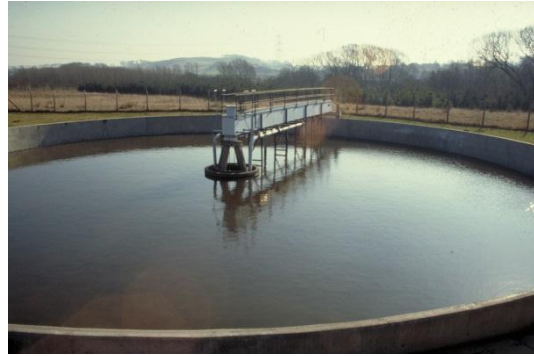
The other two programmed reviews have been incorporated into the second River Basin Management Plan.

2. Quality & Standards

We work with Scottish Water to ensure the completion of their environmental improvement projects as detailed in the Quality & Standards investment programme, agreed with the Scottish Government.

We also ensure Scottish Water complete planned studies which will be used to direct future investment and support delivery of the River Basin Management Plans.

Scottish Water has made progress in delivering planned improvements to the water environment, however a significant number of projects have been delayed due to planning, monitoring, modelling or ground condition issues. Twenty-four unsatisfactory intermittent discharges have been improved in Glasgow, however five were delayed. Five of the eight upgrades planned to wastewater treatment works were completed, with the remaining three experiencing significant delays and are now forecasted to be delivered in two to four years.



One of the three bathing water studies was completed, with the other two delayed into next year due to monitoring and modelling issues. We have recently agreed Scottish Water's revised delivery plan which re-prioritises these projects and takes account of new planning and delivery arrangements introduced by Scottish Water which should help address such issues going forward.

3. Diffuse Pollution

There have been 1,460 farm revisits (1,281 first revisits and 179 second revisits) to non-compliant farms in the 14 priority catchments over the last year. The percentage of revisited farms which are either compliant with the General Binding Rules (or have undertaken significant remedial work but have yet to complete) reached 83%. The severe floods which hit Scotland over the Christmas and New Year period resulted in some of the work we have been doing with land managers being put back by a year.

Land Unit staff have been delivering lectures and workshops at Scotland's Rural College and the University of the Highlands and Islands to educate students who will be the next generation of rural land managers and workers.

4. Water Environment Fund

During the year the Water Environment Fund and pilot catchment projects committed expenditure of almost £2m. Over the year 16 km of river treated for morphology (physical condition) and fish access have been improved, with one water body upgraded to "good" status. Control and eradication of invasive non-native species has been funded along 281 km of rivers, in 43 water bodies. Restoration plans and designs have been produced that will achieve good status in 40 water bodies in future years, improving status by at least one class⁵ for 12 water bodies and improving 1,112 km of river for fish access or morphology.

5. Pilot Catchment Projects

Over the last year the agreed work plan for the South Esk, Dee, Nith, Glazert Water and Leven pilot catchments has continued to be delivered with the objective of improving physical condition and natural flood management potential in downgraded water bodies. Of the 15 water bodies being progressed, three are at the land-owner engagement stage, five at options appraisal, six at the point where third parties are engaged and leading on design, and one where we have taken on the design role.

⁵ There are five Water Framework Directive water environment classes. These are: high, good, moderate, poor and bad.

New Life for a North Lanarkshire Community

A North Lanarkshire community is enjoying a new lease of life as a result of an ambitious partnership project funded by the Water Environment Fund. Stane Gardens had once been home to both an iron works and a tar factory. Following the decline of these industries the community was left with a degraded river running through a culvert, and highly contaminated land which posed a risk to health and the environment. Along with our partners, North Lanarkshire Council and the Scottish Government, we have been transforming the derelict area into an attractive greenspace.

About 500m of open river is being created, new and diverse wildlife habitats established, and contaminated land cleaned up. The new country park will give urban residents easy access to greenspace and the new footpath network will provide safe, green routes to school. Additionally, the flood risk to the nearby Health Centre has been reduced, so flooding which previously cost £2m to remedy should be a thing of the past. This partnership project is simultaneously providing environmental improvements, community health and well-being benefits, and enhanced economic development.

From a water environment perspective it will result in one water body moving to good status for morphology (physical condition).



4. Second River Basin Management Plans

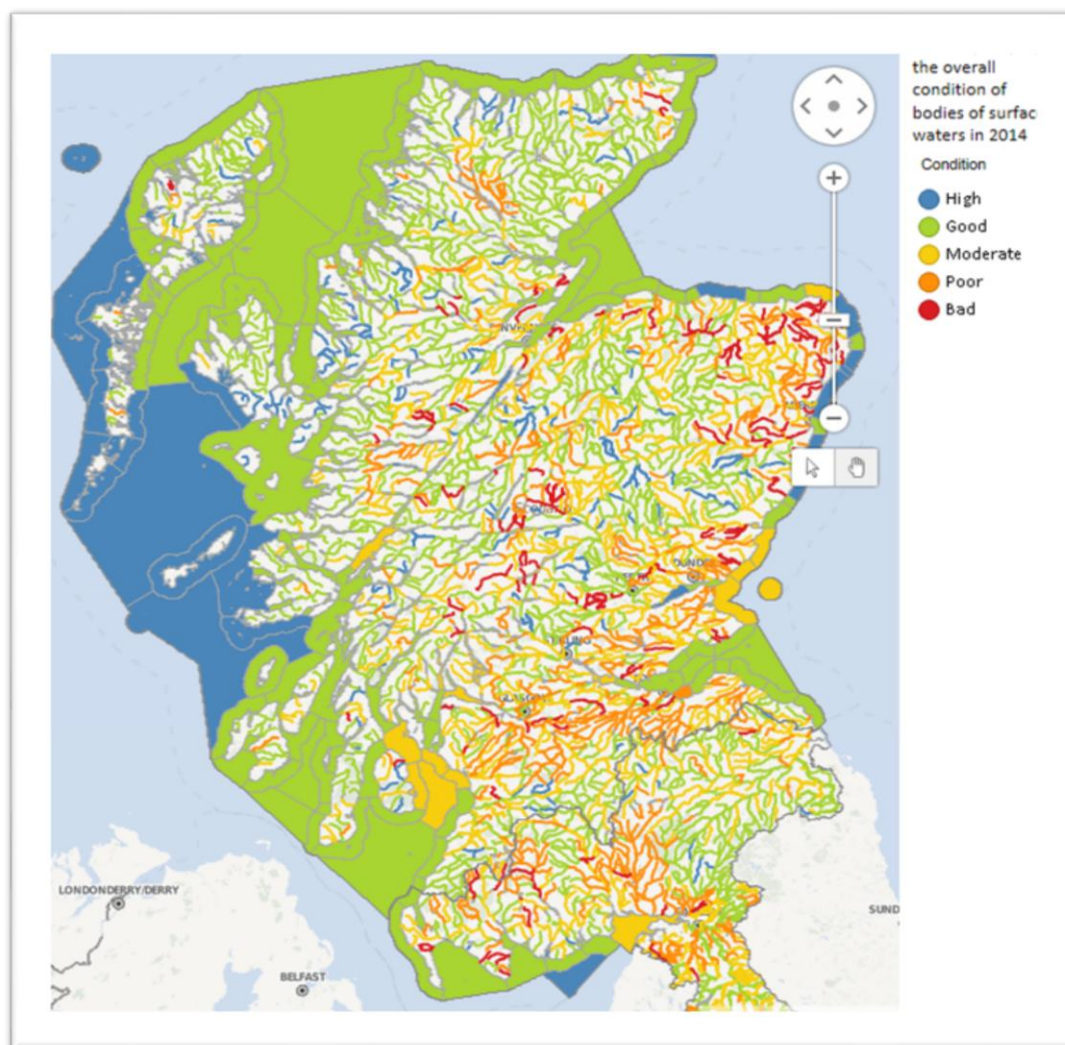
Publish the second River Basin Management Plans for Scotland and the Solway-Tweed river basin districts by 22 December 2015.

What difference have we made?

We have planned the next stage of improving Scotland's water bodies

The second River Basin Management Plans are a legal requirement of the European Water Framework Directive. The plans are the second in a series of three plans, each covering a six-year period from 2009 to 2027, and we produce them on behalf of the Scottish Government. These will set objectives for Scotland's water environment for the next two planning cycles up to 2027.

This target has been achieved as both the [Solway-Tweed and the Scotland river basin plans](#) were ready for publication in December 2016. The latter was published on 21 December. The Solway-Tweed is a cross-border plan. Whilst it was ready for publication by 22 December, the plan along with all English plans, was delayed. The Solway-Tweed plan was published in February, along with our new [Water Environment Hub](#), an on-line tool providing information on river basin planning for both plans, through a series of maps, charts and tables.



5. Radioactive Waste Disposals

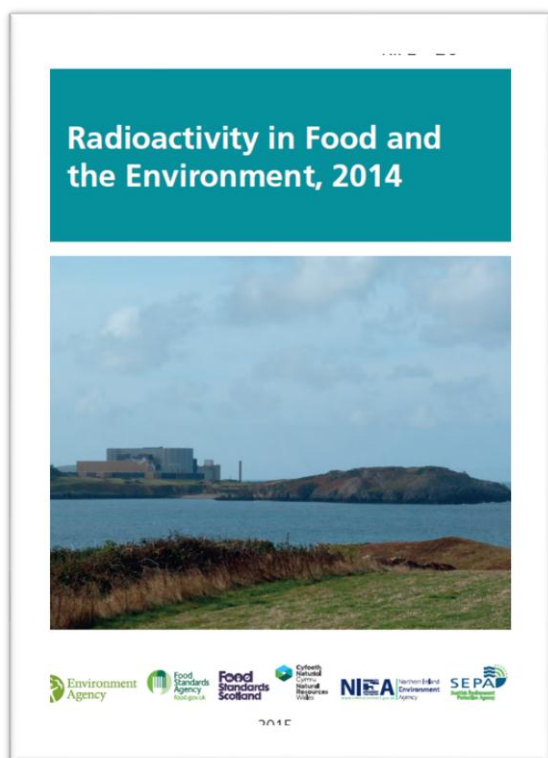
Ensure that no member of the public receives a radiation dose exceeding the annual dose limit of 1 millisievert as a result of disposals of radioactive waste authorised by SEPA.

What difference have we made?

We have made sure people are protected from the harm of radiation

We do this by monitoring the compliance of nuclear, non-nuclear and equivalent Ministry of Defence sites with the conditions included in their registrations or authorisations that we issue under the [Radioactive Substances Act 1993](#). Each year, SEPA publishes in partnership a retrospective report on Radioactivity in Food and the Environment (RIFE).

The most recent report, [RIFE 20](#) published in October 2015 confirms that in 2014 no member of the public received a radiation dose exceeding the annual dose limit of 1 millisievert from disposals of radioactive waste authorised by SEPA. This record has been maintained through to the end of March 2016.



6. Flood Risk Management Strategies

Publish 14 Flood Risk Management Strategies covering the whole of Scotland by 22 December 2015.

What difference have we made?

Scotland now has strategies in place to reduce the impact of flooding

We worked with Scottish Government and responsible authorities designated under the Flood Risk Management (Scotland) Act 2009 to deliver Scotland's first risk-based and plan-led approach to managing flood risk. We collated and enhanced the best available information and data to produce a set of 14 complementary Flood Risk Management Strategies, covering the whole of Scotland, by the statutory deadline of December 2015. These identify areas where the benefit of investment is greatest and lay out our future priorities and actions. Detail on delivery of actions in the first cycle (2016-2022) is contained in the Local Flood Risk Management Plans produced by lead local authorities and published in June 2016.

This target was achieved as [Flood Risk Management Strategies](#) were approved by the Minister for Environment, Climate Change and Land Reform on 3 December 2015 and published on our website on 14 December. The Strategies were launched by the Minister and our Chief Executive at the [new flood protection scheme in Selkirk](#) on 11 January 2016.

A key element of sustainable flood risk management involves finding ways to manage flooding at its source, rather than solely focusing on traditional engineering further down the catchment. This can include, for example, riverbank planting, reinstating floodplains, restoring coastal areas or returning watercourses back to their natural shape.

We published a new handbook to help local authorities and landowners implement natural flood management measures. The [Natural Flood Management Handbook](#) was launched at an event in January 2016 held by the Chartered Institution of Water and Environmental Management. The impact of heavy rain in December has shown that new ways to manage flooding are needed, and the handbook details how natural flood management can contribute to reducing the impact of smaller scale, frequent flooding, as part of a suite of measures.

Significant flooding over the winter of 2015-2016 broadly confirmed our understanding of flood risk and that the agreed approach for its management is appropriate. The following infographic summarises some of the main findings and proposed actions set out in the Flood Risk Management Strategies.

Scotland's flooding future 2016-2021

108,000

properties are at risk of flooding



73% residential

£252 million

expected annual flood damage



- 56% river flooding
- 23% surface water flooding
- 21% coastal flooding

What do Flood Risk Management Strategies say?

14 new flood warning schemes



formal flood protection or engineering works

10,000 properties protected by the 42 schemes
£1,310m potential value of benefits

134 flood protection studies

£8,000m potential economic benefit

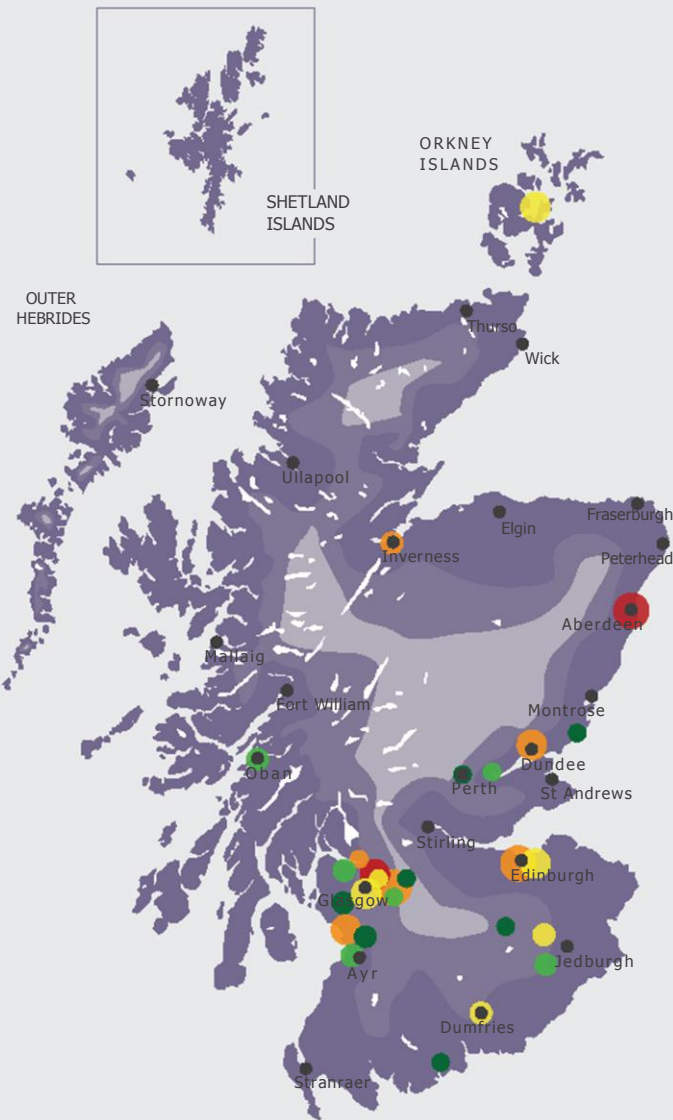
2,000km of road network is at risk of flooding



500km of rail pass through high risk areas



200,000 hectares of agricultural land at risk of flooding



Annual Average Damages Map for Scotland

Annual Average Damages (£ million)	Number of properties at risk
1.20 - 1.40	0 - 290
1.42 - 2.10	291 - 700
2.11 - 4.10	701 - 1,500
4.11 - 10.00	1,501 - 2,900
10.01 - 16.00	2,901 - 13,000

7. Solway Flood Warning Scheme

Launch the new Solway flood warning scheme by 31 December 2015

What difference have we made?

We have reduced the impact of flooding for people in the Solway Firth

Flood warning schemes are a way of minimising the impact of flooding on communities, business and the economy. The Solway Firth flood warning scheme was one of the major milestones listed in the 2012-2016 Flood Warning Strategy with funding approved by Scottish Government. It will contribute towards duties outlined in the [Flood Risk Management \(Scotland\) Act 2009](#) and help Scotland adapt to the impacts of climate change.

It became operational through Floodline on 9 October 2015, two months ahead of schedule, when the scheme was launched by the Minister for Environment, Climate Change and Land Reform, Dr Aileen McLeod.

The new service allows us to provide early notification of potential coastal flooding to communities along the Solway Firth, from Loch Ryan to Gretna.



Partnership Working

More than 1,400 homes and businesses could benefit from our new coastal flood warning scheme for the Solway Firth. Its launch was the culmination of extensive work and co-ordination with our partners who included Dumfries and Galloway Council, the Met Office and HM Coastguard.

As the Minister for Environment, Climate Change and Land Reform, Dr Aileen McLeod remarked at the launch:

“I am pleased to support SEPA in their crucial role as flood warning authority and the Solway Firth coastal flood warning scheme is an excellent example of partnership delivery.”

“I would encourage everyone who lives or works in or travels through the coastal warning areas from Loch Ryan to Gretna to sign up for flood warnings immediately. Signing up for flood warnings is an important first step and acting on that warning can make a huge difference to individuals and communities.”

8. Radioactive Incident Monitoring Network

Operational readiness - 100% Radioactive Incident Monitoring Network (RIMNET).

What difference have we made?

We have made sure that Scotland would have the information it needed if radioactive material was released.

The Radioactive Incident Monitoring Network (RIMNET) forms a key part of the UK's National Response Plan to oversee nuclear incidents and is run by the Met Office. It comprises a series of monitors located throughout the UK, 27 of which are in Scotland. The monitors are linked to a central database facility from which information can be obtained via terminals. These are located in various government bodies and agencies including four in SEPA, located in two locations. The Met Office is responsible for the provision and maintenance of the monitors, central database facility, terminals and response to elevated readings.

The purpose of this measure was to record our completion of monthly checks on the reliability of our four terminals and ensure we had continuous access to the network from a least one of the SEPA sites at any one time. Thus in the event of an incident involving the release of radioactive material we could obtain information and data held on RIMNET, and input data that could be used by others. This target was achieved as we have maintained access to the network from at least one of the SEPA sites throughout the year.

9. Air Hazard Emergency Response Service

Maintain operational readiness of our public warning and incident response systems – 100% Air Hazard Emergency Response Service (AHERS).

What difference have we made?

We have made sure that Scotland would have the information it needed to reduce the harm to people if lots of particulates or toxic gases were created by a major fire, explosion or other serious incident.

Scotland's Air Hazard Emergency Response Service needs to be in a state of readiness to respond to an incident 24 hours a day throughout the year. There is one national advisor, and two regional field response teams (one in the north and one in the south) on call at any time. This measure ensures we can meet our agreed response times and protect human health and the environment during an airborne hazard emergency, as part of our responsibilities under the Civil Contingencies Act.

The Air Hazard Emergency Response Service works from three rotas, all of which remained fully staffed and available to respond to incidents when required, ensuring this target was met. We responded to four incidents, but none of them were of significant scale, risk or duration to warrant deployment of the Field Response Teams.

10. Bathing Water Data

Maintain operational readiness of our public warning and incident response systems - 100% daily SEPA bathing water quality decisions issued.

What difference have we made?

We have let people know when it is safe to bathe at official sites

During the official bathing season we have a statutory duty to provide daily predictions of water quality and health risk advice at SEPA beach signage sites (23 locations).

This target has been achieved as a daily bathing water forecast was issued for each of the 23 sites throughout the bathing water monitoring period.



Scotland's beaches grading under [new EU classification](#)

Before the start of the 2016 bathing season, 80% of Scotland's bathing waters were confirmed as achieving the new, much stricter, European water quality standards. Out of the 84 officially designated bathing waters in Scotland:

- 17 were classed as 'excellent'
- 38 were rated as 'good'
- 12 achieved the 'sufficient' standard
- 17 were rated as 'poor'

The much tighter water quality standards use four years of monitoring data to provide a more consistent picture of water quality.

We are displaying these new classifications across Scotland's beaches from June to mid-September. For the 2016 bathing season we have added a further six electronic signs, extending our network giving daily water quality information to 29 beach locations. This information is also available on SEPA's website, smartphone app and via the Beachline number.

The new locations are: Fisherrow Sands, Heads of Ayr, Nairn (East and Central), and St Andrews (East and West Sands).

We are preparing tailored improvement plans to help each of the 'poor' bathing waters meet at least the 'sufficient' standard by 2020. These will focus on dealing with any problematic sources of pollution and improving advice on when to avoid bathing, such as following heavy rainfall. We will put additional effort into working with our key partner organisations, the Scottish Government, Scottish Water, local authorities, local stakeholder groups and the agricultural sectors.

11. 100% Daily Flood Guidance

Maintain operational readiness of our public warning and incident response systems - 100% daily flood guidance.

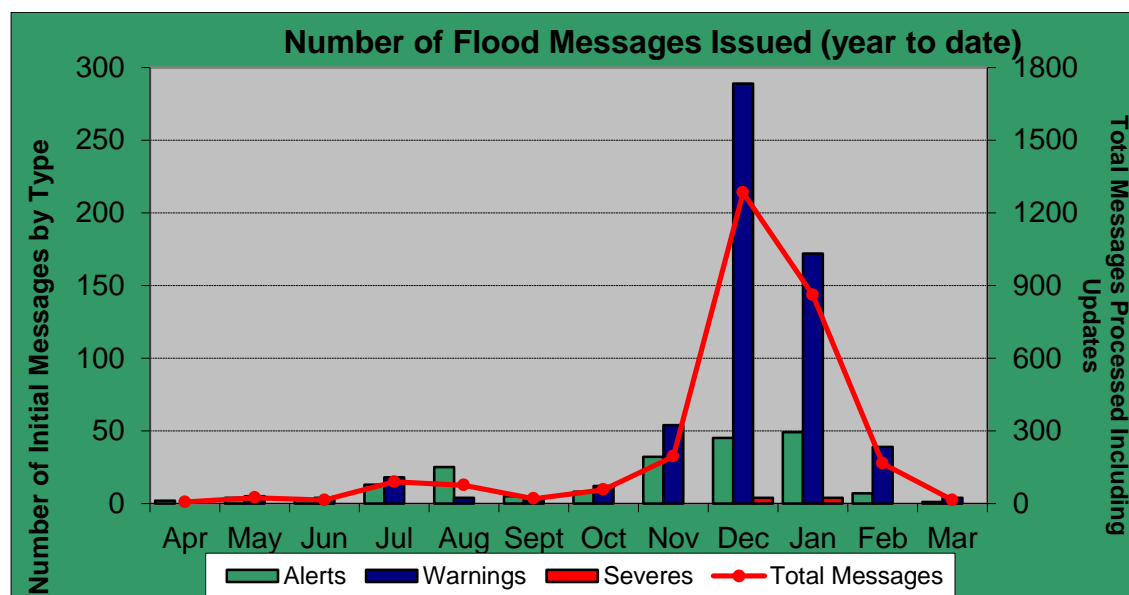
What difference have we made?

We've helped to reduce the impact of flooding in Scotland

We work in partnership with the Met Office to deliver the [Scottish Flood Forecasting Service](#). We produce a five-day outlook Flood Guidance Statement which is currently sent to over 540 emergency responders in 135 organisations, every day of the year and at least once per day. It provides an overview of the expected flood risk across Scotland for the next five days.

The guidance highlights the risk for the main types of flooding – river, coastal and surface water. By providing an early notification each morning, the impacts from flooding can be minimised. It is a high profile, vital service that we provide and any disruption to this service is likely to result in reputational damage, for SEPA and the Met Office, given its importance to supporting operational responders in making proportionate responses to potential flooding events.

This target was achieved because we ensured that we sent out 100% of Flood Guidance Statements by 12 noon, every day of the year.

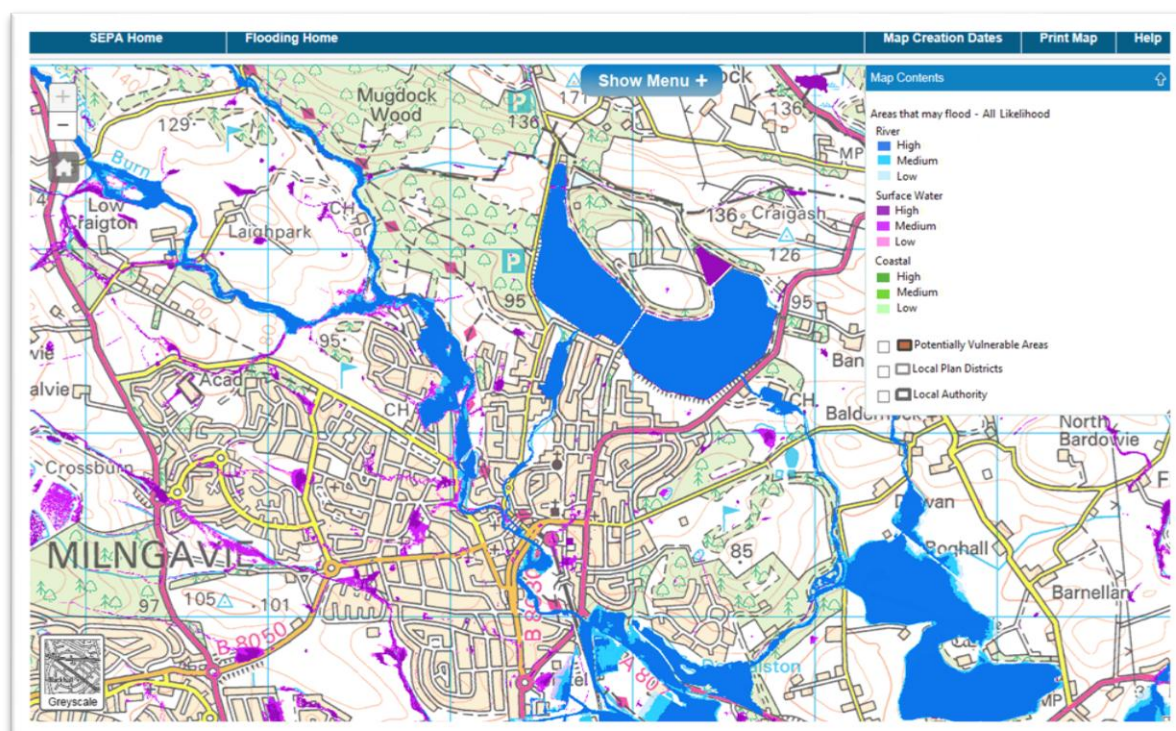


Flooding – innovations in forecasting

After another winter of heavy rain and floods when our flood guidance and flood warning services have been at full stretch, we continue to seek ways to improve our ability to predict the timing and extent of any flooding.

More accurate information about expected rainfall is a key part of our predictions. We have funded [a new initiative](#) with partners from [National Centre for Atmospheric Science](#) (NCAS), the University of Leeds, Scottish Water and the Met Office to improve our understanding of rainfall and assist flood predictions in Scotland. The pilot project was based in the North of Scotland, running from January to July 2016. It employs a mobile radar scanning the clouds (known as the NCAS [Mobile X-band Radar](#)). All partners are keen to increase the accuracy of forecasts of heavy rain and in improving rainfall radar coverage across Scotland. This is the first in-depth study of clouds and rainfall, and their links to flooding in Scotland and has the potential to improve the accuracy of our flood warnings.

Capturing information after a flood is an important element of our work, allowing us to learn from these events, adjust our flood maps and to improve flood risk planning. This year a new Flood Event Data Capture tool is being tested by our Flood Unit. This should improve our use of smart technology in collecting flood data and assessing the impact of flooding. The tool allows field staff to use a smart phone or tablet to collect data on the ground which is instantly plotted to a map on the device. The device can also display historic flood records for that specific location. The data can indicate areas where flooding is at odds with our present [flood maps](#) and where we should concentrate our efforts in gathering more post-flood data or remodelling the data held. Ultimately the data will assist in assessing priorities in the next cycle of the [Flood Risk Management Strategies](#).



12. 98% Flood Warning

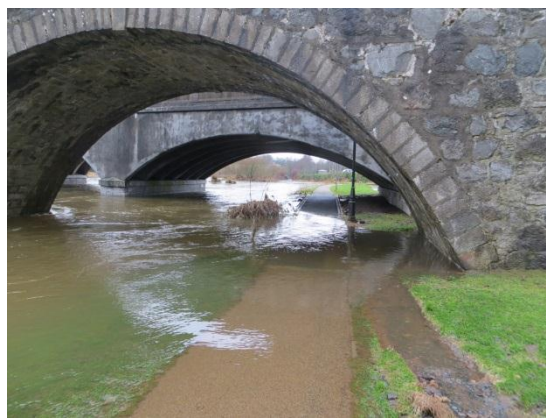
Maintain operational readiness of our public warning and incident response systems - 98% flood warning.

What difference have we made?

We've helped to reduce the impact of flooding in Scotland

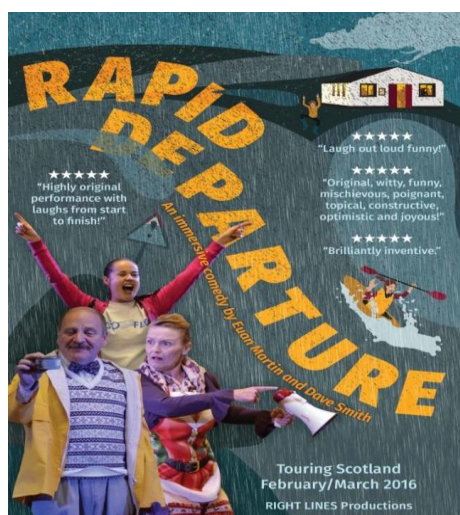
We have a duty to issue flood alerts and warnings and these are published on our website and sent out to registered customers. In 2011 we launched a major expansion to our [Floodline](#) service allowing registered customers to receive flood messages directly by phone or text. To deliver this service, we purchased a system capable of sending out messages to registered customers via text messages, voice messages, email, fax or pager. Any downtime during a major flood event is likely to generate significant negative publicity and reputational damage for SEPA.

We issue regional alerts and local warnings when we believe members of the public or emergency partners need to be vigilant to potential flooding or when we are aware flooding is imminent and there is a known risk to land, property, infrastructure, essential services or to life. We achieved this measure because the messaging system has performed very well and it has been available for effectively 100% of the time. The amount of downtime for either the internal staff system or our external website amounted to only 4.5 hours over the year.



Raising Awareness of Flood Risk

As well as targeting specific audiences (such as pet owners and the elderly) we have been carrying out a wide education programme over the last few years. This is to raise general awareness of flooding and how to be prepared and has included school visits, a school play and supporting a professional theatre production around flooding. Early last summer we engaged with as many as 3,600 pupils in our Safe Highlanders and Safe Taysiders events in Inverness and Perth respectively. These events were organised in partnership with the emergency services, local authorities, local businesses and charities working together to communicate a range of community safety messages to pupils and their teachers and were an opportunity to raise awareness of flood risk. We discussed the causes and consequences of flooding, ways to prepare for flooding, and how to stay safe in a flood, as well as promoting our [Floodline Kids](#) service, a dedicated section of the Floodline website hosting games and activities for children to use. Over the year we reached around 10,000 Primary 7 pupils through this and other activities.



After the successful tour of parts of Scotland in May and June 2015, we initiated significant sponsorship, with Scottish Government support, of [Right Lines Productions](#) to enable a tour of other parts of Scotland in Spring 2016. The interactive comedy theatre show received very positive [reviews](#) last year. Although the show “Rapid Departure” was an enjoyable comedy, its purpose was to convey a very serious message. The issues explored included global warming, climate change, renewable energy, and the impact of flooding. All are important subjects for everyone and were particularly relevant to some of the areas the play visited, where flooding has had an impact in previous months.

Climate Change – Assessing the Risks

We are already seeing changes to [Scotland's climate](#). We need to understand these changes and what they mean for our environment, for our communities, for businesses and for the resilience of crucial services and infrastructure. Every five years, a UK wide assessment of climate risks based on the most up-to-date science and projections is undertaken: the *UK Climate Change Impact Assessment*. The report's purpose is to ensure a clear understanding of the impacts and risks posed by climate change and it provides a basis for action to minimise these impacts. It plays a critical part in determining what actions Scotland needs to take in response to these changes in the years ahead. We have worked closely to support this assessment with information, evidence and expert analysis – particularly with respect to flood risk – to make sure that risks for Scotland are clearly identified and taken account of in decision making. The assessment was published in July 2016.

13. Reporting Requirements

Deliver 100% of the data required for our statutory reporting obligations, with 90% delivered within agreed timescales.

What difference have we made?

We have produced information to help people make decisions

We aim to be an influential and respected authority. To achieve this we must turn our data into useful information and produce high quality reports on time. Some of these reports are required by legislation or under agreements with the UK and Scottish Governments.

We identified ten reports that we needed to deliver this year and we completed eight of them. Two were postponed due to external factors and will now be delivered in 2016-2017.

14. Citizen Science – Project Finder

Increase the number of registered citizen science and action projects by 50% in Scotland's Environment website⁶ [Project Finder](#).

What difference have we made?

We've provided more opportunities for people to learn about the environment and play a positive role in protecting it

In 2013, Scotland's Environment Web (LIFE+) Project and [The Conservation Volunteers](#) undertook a project to look at the impact that engagement in citizen science activities has upon participants' attitude towards the environment. The research concluded that there is a meaningful link between citizen science participation and increased environmental knowledge, and positive environmental attitudes and behaviour.

[Project Finder](#) is an online searchable register of citizen science projects and citizen "action" projects on offer in Scotland. It is intended to provide a "one-stop-shop gateway" to help volunteers find projects of interest and help projects to "advertise" for volunteers.

This measure was achieved, as Project Finder reached 81 registered projects, an increase of 66% on the level at the beginning of the year, against the 50% target.

To achieve this target, we worked with organisations such as Volunteer Scotland, asking them to list their projects on the site and to evaluate and promote the application. We also worked with Education Scotland to encourage schools to use Project Finder as a way to promote citizen science in schools.



Scotland's Environment Web was selected as one of the 24 [Best LIFE Environment Projects](#) out of 113 that finished and were evaluated in 2015. The overall objective of the Best Projects exercise is to help improve the dissemination of LIFE project results by clearly identifying those projects whose results, if widely applied, could have the most positive impact on the environment. The final results were announced in May 2016

and Scotland's Environment Web was one of five to be awarded the accolade "Best of the Best LIFE project" under the [Best Environment projects](#) category.

⁶ Scotland's Environment Web project was supported by the European LIFE+ programme until August 2015.

Scotland's Environment Web is the product of an innovative partnership between some of Scotland's leading organisations that work to protect and improve the environment. Our partners⁷, the objectives and principles of the partnership, and a brief description of some of the tools and products are best viewed on the Scotland's Environment [website](#) or in our publication: "[Scotland's Environment Web Layman Report: August 2015](#)." One key principle of the partnership is the sharing of data from multiple sources to support decision and policy making, and to raise awareness. This serves to extend the reach and influence of our valuable data to a wider audience. Scotland's Environment Web was mentioned in the Scottish Government's [Open Data Strategy](#) as a best practice example of providing access to open data.

Scotland's Environment Web continues to evolve, with many linked publications and interactive tools and related websites for a more specialised view of environmental themes (biodiversity, soils, aquaculture, and currently under development, noise). At last count there were 19 different tools transforming over 300 openly published data sets into interactive and engaging formats. These include various mapping tools such as [Map View](#) which is the only place users can view any combination of different environmental map layers; or [Land Information Search](#) which allows a search for environmental features that fall within a chosen area. Information on environmental features, such as native woodlands, and other designations taken from the Land Information Search, is required by Forestry Commission Scotland and the Scotland Rural Development Programme when applying for grants or licences. To keep informed of new publications, additional tools or enhancements to existing tools, and news from our partners, it is best to subscribe to our [monthly e-newsletter service](#) via the website.

15. Environmental Monitoring Plan

Complete 95% of our environmental monitoring plan.

What difference have we made?

We've understand the current state of our environment and long-term trends

We have a duty to monitor and report on the state of Scotland's environment and to use that scientific understanding to inform our regulation of activities that may affect its quality. Our environmental monitoring plan ensures we collect the right samples at the right locations at the right time and we meet our statutory monitoring obligations under European, UK and Scottish environmental law.

In 2015 we collected 28,495 samples compared to the planned 27,728 in the 2015 environmental monitoring plan⁸ ensuring we met 100% of our environmental monitoring plan.

2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
97.6%	98.2%	100%	100%	100%

⁷ Main partners include British Geological Survey, Education Scotland, Forestry Commission Scotland, Health Protection Scotland, Historic Scotland, Keep Scotland Beautiful, Marine Scotland, NHS Scotland, Scottish Natural Heritage, The Conservation Volunteers, The James Hutton Institute and Scottish Government.

⁸ Actual samplings can exceed planned samplings for a number of reasons, including some needing a repeat sampling on instructions from our laboratory.

16. Statutory Monitoring Requirements

Meet 100% of our statutory monitoring requirements.

What difference have we made?

We've collected and submitted important environmental monitoring data that helps us understand the current state of the environment and its impact on our health

We must collect and report Scotland's statutory monitoring requirements for the Urban Waste Water Treatment Directive and the Bathing Water Directive. The parameters and sampling frequencies are set by the Directives and these are incorporated into our National Monitoring Plan which generates monthly sampling schedules for the year.

The main objective of the Urban Waste Water Treatment Directive is to ensure that all significant discharges of sewage are treated before they are discharged either to inland surface waters, ground waters, estuaries or coastal waters. These waters are generally those where the potentially impacted population is greater than 2,000 and the waste water thus requires secondary treatment. The Directive sets tight sampling and analysis standards for these discharges.

All planned samples for the year to December 2015 were taken and all analyses completed for all the parameters required under the Urban Waste Water Treatment Directive.

Although this measure does not cover the state of the discharges being analysed, it is worth noting that provisionally, at the end of 2015 on a rolling 12 months basis, 96% of sites were compliant. This equates to 10 works now failing compliance.



The Bathing Waters Directive sets limits on indicator bacteria concentrations in seawater at identified bathing waters in Scotland. We monitor Scotland's 84 designated bathing waters throughout the bathing water season from 1 June to 15 September. The results of this monitoring are posted on our website and released as an annual report.

We reported the achievement of 100% of our sampling under the Bathing Water Directive at the end of the second quarter.

17. VIBES Awards

Increase the number of businesses entering the annual VIBES⁹ awards scheme.

What difference have we made?

We've encouraged more of Scotland's environmental champions to share the good work that they are doing

Many businesses in Scotland are taking significant steps to improve or reduce their impact on the environment, often saving money in the process. The [VIBES Awards](#) were developed in the year 2000 to recognise these efforts and to showcase best environmental and sustainable practice within businesses.

This area of work is a way of measuring our contribution to the Scottish Government's aim of achieving sustainable economic growth. Rising numbers of entrants into the annual competition acts as a reflection of our success in this area, especially in encouraging businesses to appreciate the environmental impact of their work.

This measure was achieved as we succeeded in increasing the number of entrants and by mid-July we had received 89 entries compared with 76 the previous year. Entries came from 18 different sectors with the most coming from the manufacturing sector (9), followed by hospitality (7) and food & drink (5).

The awards ceremony was held on 26 November at the Sheraton Hotel, Edinburgh and was attended by 280 guests. The winner for each category was as follows (number of entries in brackets):

- Management – Large (7) – [Emtelle](#) (global manufacturer of blown fibre and ducted network solutions for the telecommunications industry).
- Management – SME (7) - [CMS Windows](#) (windows, doors and curtain walling manufacturer).
- Environmental Product or Service (13) - [Aberdeen Heat and Power](#) (district heating operator in Aberdeen).
- Circular Economy (6) - [Better World Books](#) (reseller of redundant books).
- Cooperation (8) - [Taylor Wimpey and C&D Associates](#) (partnership developing sustainable urban drainage systems).
- Transport (3) – [City Car Club](#) (short-term car and van rental service)
- Hydro-nation (4) - [Bridge Biotechnologies](#) (manufacturer of low carbon disinfection and water treatment solutions).
- Micro Business (16) - [Lobster Pod](#) (live shellfish storage and transportation system).
- Commendations – [Clyde Shopping Centre](#) (Clydebank) and [Tinto Toners](#).

Full details of each of these winners are available on the [VIBES website](#), complete with a case study video.

⁹ This is a strategic partnership between SEPA, Scottish Government, Scottish Enterprise, Highlands and Islands Enterprise, Scottish Water, Zero Waste Scotland, Energy Saving Trust and 2020 Climate Change Group. The awards are also supported by CBI Scotland, Federation of Small Businesses, Institute of Directors and Bright Green Business.

This year's prize-winning ceremony was also the last for David Sigsworth, who retired as SEPA Chair in December 2015. During his eight years at SEPA he had always promoted the award scheme, been on the judging panel and presented the prizes. It is also notable here that we have seven UK entries from VIBES winners for the prestigious [European Business Awards for the Environment 2016-2017](#) (EBAE). This is a



significant achievement as there are only 11 UK entries, and VIBES winners were competing against 13 other similar environmental award schemes for places.

The EBAE awards take place every two years and in 2014 six out of 12 of the UK entries were VIBES winners. Only two of these UK entries went forward to the [European finals](#) and these were both VIBES winners. There were only 16 finalists competing in five categories and the two UK entries ([The Bay Fish & Chips](#) and [Vegware](#)) both won runners-up prizes.

18. Landfill Tax

Establish a Landfill Tax Team and support Revenue Scotland in the collection of the Scottish Landfill Tax.

What difference have we made?

We've helped to encourage Scotland to produce less waste and reuse or recycle the waste it does produce

We have established a Landfill Tax team to support Revenue Scotland in the collection of the Scottish Landfill Tax. Revenue Scotland collects the tax and we support them, primarily through raising awareness, and compliance, investigation and enforcement work. We have also established a Scottish Landfill Communities Fund Team to regulate the Scottish Landfill Communities Fund. The purpose of this measure was to show our progress in supporting them with this work.

The target was achieved as we completed all our scheduled tasks in support of Revenue Scotland over the year. Our Scottish Landfill Tax team has built up good working relations with Revenue Scotland, and, as anticipated, our knowledge and experience of the waste sector has proven very valuable to them in relation to landfill tax compliance and illegal activity.

We have provided support to Revenue Scotland at the [Devolved Tax Collaborative](#) (a twice a year forum organised by Revenue Scotland) and at [landfill operator forums](#).

We held a waste crime seminar for the Revenue Scotland Board and staff, as well as for Scottish Government officials. This highlighted the extent of criminality in the waste sector and our actions to address it. We have worked with Revenue Scotland colleagues to review and update guidance in light of legislative change or operational feedback and have regularly provided information to Scottish Government colleagues to assist them with policy development and legislative change.

Our team has undertaken many visits with Revenue Scotland to landfill sites and waste producers. This has provided an opportunity for tax payers and relevant third parties to become aware of our new Scottish Landfill Tax role and to discuss the implementation of the new tax directly with our staff.

The team successfully assessed over 50 liability rulings (operators' previous Landfill Tax arrangements under HM Revenue & Customs) by the required timescale. We have received Scottish Landfill Tax returns for the first three quarters of 2015-2016. We have successfully analysed these and other available information, identifying discrepancies, trends and patterns. This has led to us undertaking further formal compliance work.

We provide an intelligence support service to Revenue Scotland and our team works closely with dedicated staff in our Intelligence Unit to target our compliance activities. The latter led a project on a key problematic waste stream and the success of this pilot project means we intend to apply such methods nationally in 2016-2017. We are currently working closely with Police Scotland on an intelligence-led operation involving the movement and disposal of waste. We have provided training and raised awareness throughout SEPA on our role and, in particular, continue to work closely with our regional teams regarding waste activities that may be liable for landfill tax. The additional leverage arising from potential tax liability for such activities has already led to some positive results.

Scottish Landfill Communities Fund

We are also the regulator of the [Scottish Landfill Communities Fund](#) which is expected to have a value of over £7m this year. We are working closely with Revenue Scotland to ensure we give sufficient guidance for all those involved and to assist Revenue Scotland in confirming any credit claimed by landfill operators.

We continue to build relationships with the [Approved Bodies](#) and have attended a number of meetings of the Scottish Landfill Communities Fund forum. So far we have approved 15 bodies to receive and distribute the funds contributed by landfill operators. We have worked with them to ensure they understand and comply with the requirements of the fund. We have carried out 12 compliance inspections and found a good level of compliance.

Scotland leads the way in reducing fast food waste

New regulations required fast food giant McDonald's to separate and recycle their waste. The challenge was to change staff and customers behaviour. We engaged at an early stage with McDonald's and different recycling options were tried out in Glasgow. Customers were asked for feedback. From this, a user-friendly recycling station that customers would easily recognise and want to use was created. We also brought McDonald's together with waste contractors who provided technical advice on waste and recycling. This created business opportunities for both parties. Food waste is now sent to an anaerobic digestion plant to produce biogas and fertiliser for agriculture. McDonald's has gone well beyond simple compliance. Their projected recycling rates has risen from around 20% to 60%. The project has been so successful within Scotland, McDonald's has decided to introduce the recycling stations across the rest of the UK. McDonald's is leading the way in recycling, influencing other outlets and fast food companies.

19. Landfill Audits

Deliver 100% of planned audits by 31 March 2016.

What difference have we made?

We've encouraged better management of landfill sites and we've encouraged them to reduce the amount of greenhouse gases they emit

Landfill sites have been audited on a rolling basis since 2009 with the aim of driving improvements in the standards of operation. Over time, further objectives have been added including reducing greenhouse gas emissions, developing standards for operation, improving consistency of regulation and preparing for the impact of the implementation of Zero Waste. The project continued this year and is likely to roll forward to future years.

The audits help us understand and address site specific issues as well as sector wide issues at a time of significant change. We need to manage the reduced demand for landfill carefully, protecting the environment and communities from both active and closing sites.

The landfill sites to be audited were chosen by assessing where we can make the biggest impact. The process considered performance scores under our [compliance assessment scheme](#), potential risk, the length of time since a previous audit was carried out, and information from local teams.

A minimum of four landfill site audits were planned for 2015-2016 but we succeeded in completing six detailed audits by the end of the year. The audits will continue on a similar basis next year.



The audits carried out were split between our three regions. Analysis of the audit findings uncovered some common themes, such as issues with the overall site management plan and failings in assessing the potential for on-site resource use improvements. Partly due to the wet weather experienced last year, there have been issues with contaminated liquids “leaching” or seeping out of landfill sites.

As in previous years, most sites showed decreasing waste flows. This leads to extended completion times for phases or for sections of the site to be filled, leaving them open to the elements for longer and increasing the likelihood of complaints. Reduced waste volumes appears to be due to increased recycling rates, preparation for the impact of landfill bans and the [Waste \(Scotland\) Regulations 2012](#) beginning to take effect, with more waste being pre-treated and diverted from landfill.

One site in the South West had been underperforming for a considerable period. We decided to carry out an in-depth audit of all activities on the site, not just the landfill. A number of specialists from across SEPA visited the site to carry out the audit, which forms the basis of a series of improvement plans for the operator, with the aim of returning the site to compliant status to protect the environment and the local community.

20. Corporate Greenhouse Gas Emissions

Development of a new greenhouse gas target.

What difference have we made?

We've put in place challenging targets to reduce our own green house gas emissions

This measure recorded progress in reviewing the ongoing appropriateness of our existing long term target to reduce emissions of CO₂e¹⁰ by 42% by 2020 compared to a 2006-2007 baseline.

After reviewing our existing long term target we have developed a new greenhouse gas target as planned. SEPA's Board agreed in September to maintain our very ambitious target to reduce our greenhouse gas emissions by 42% by 2020. The Board also agreed to support it with two more specific targets. These were focused on two areas directly in our control: our buildings and our travel. How we did against these targets last year is outlined below.

Our ambition	Our two new agreed targets
<p>To reduce our greenhouse gas emissions by 42% by 2020 from a 2006-2007 baseline.</p> <p>How did we do? In 2015-2016, our total emissions of CO₂e were 2,827 tonnes¹¹. This is a 13.6% reduction compared to last year. Our emissions are now down 21.8% since 2006-2007 and we are more than half way to achieving our ambition.</p>	<p>To reduce energy use in our buildings by 18% by 2020 from a 2014-2015 baseline.</p> <p>How did we do? In 2015-2016, our gas use was down 12.4% and our electricity use was down 11.5% compared to last year. We are making good progress towards this target.</p>
	<p>To reduce travel emissions by 5% by 2020 from a 2014-2015 baseline.</p> <p>How did we do? In 2015-2016, our travel emissions were down 6.6% to 801 tonnes, meaning we have already met this target. We will continue to work to maximise reductions in travel emissions.</p>

Our performance during 2015-2016 has been one of the best we have ever achieved. It is the cumulative effect of many actions, some examples of which are set out on the next page.

¹⁰ Carbon dioxide equivalent, used as a standard unit for measuring greenhouse gases. It expresses the impact of each different greenhouse gas in terms of the amount of CO₂ that would create the same amount of warming.

¹¹ To calculate our emissions, we use a method promoted by the UK Department for Environment, Food and Rural Affairs (Defra) and recommended by the Scottish Government's sustainability reporting guidance.

Emissions of carbon dioxide equivalent (tonnes of CO₂e) by source

Source	2015-2016	Change from last year
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Electricity	1,663.4	-17.7%
Gas	229.9	-12.6%
Fuel Oil	15.5	10.7%
Emissions from all buildings	1908.8	-16.9%

Business car mileage	411.9	-14.1%
Pool cars	212.4	-4.0%
Trains	91.5	-4.1%
Ferries	2.2	-33.0%
Flights	83.1	41.4%
Emissions from travel	801.1	-6.6%
Sir John Murray	117.1	0.4%
Total emissions	2,827.0	-13.6%
Emissions per employee (tonnes)	2.30	-12.5%

Spotlight on: Our changing estate

A series of estate moves over the past eighteen months have contributed significantly to reducing energy demands. In early 2015 we completed our move from two offices to one in Stirling, which has reduced energy demands by more than **340,000 kWh of gas and electricity**, a reduction of **53%**. In February 2016 we also moved from two sites to a single shared office in Perth. We estimate that this will reduce our energy demands in Perth by around **77%** in coming years. In March 2016 we closed our Newton Stewart office and moved to a shared office with Scottish Natural Heritage.



Spotlight on: Optimising the Angus Smith Building

Our biggest building is the Angus Smith Building which is home to **450** staff. It hosts our data centre and one of our two laboratories. Although a new building built to BREEAM “excellent” standards, we have taken steps to reduce its energy demands even further. A number of small changes have produced dramatic effects. We have introduced a new energy management system, partitioned off certain parts of the building, reduced cooling in our server room, reduced energy demands from laboratory equipment and run a number of staff awareness campaigns. This year electricity use in the building dropped by **15%** and gas use by almost **17%**. We estimate we have saved **239** tonnes of greenhouse gas emissions from this one building in one year.

Spotlight on: Video and web conferencing

A key ingredient in reducing travel has been the introduction of Intercall web conferencing software. Around 900 of our staff are set up to use it and during the year we averaged 18 conferences a day, each involving on average 4 to 5 people. We also have video conferencing in most offices. During the year we made around **18.5** hours of calls every day. Encouraging and facilitating the use of these options not only reduces travel, but also has health and safety benefits for staff, and helps them to have a better work-life balance.

Spotlight on: The Sir John Murray

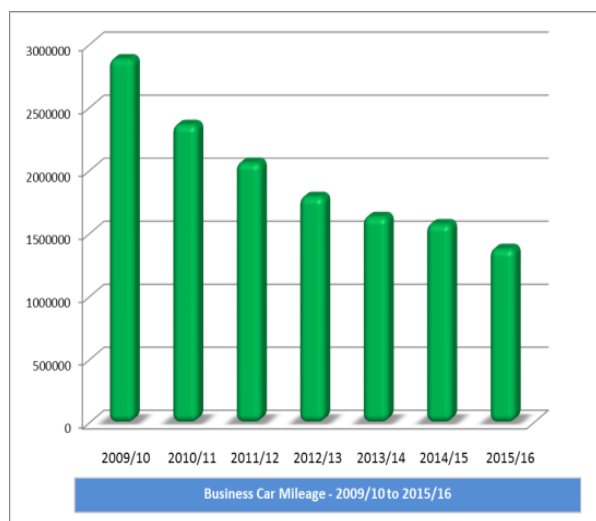
Our survey vessel, the Sir John Murray undertakes work on a three year cycle taking, analysing and reporting on more than 50,000 samples every year. By using shorter routes and by not always returning back to home port after surveys, we have been able to reduce emissions. For example, using the Caledonian Canal when travelling between the east and west coasts is estimated to save 7,700 litres per return trip and reduce emissions by 85% compared to taking a sea route.



Spotlight on: Cutting edge IT

As part of a programme to update how our staff use computers at their desks, we have implemented Virtual Desktop Infrastructure. These terminals use **86%** less energy than a traditional desktop or laptop computer and allow staff to access the same ‘desktop’ and suite of applications and data from any workstation. This approach allows us to be more flexible as well as to reduce energy consumption from our IT equipment.

In March 2016, we also invested in flash storage to replace our conventional servers. This technology uses **90%** less power and needs **85%** less cooling, and is estimated to result in an **88%** reduction in greenhouse gas emissions. We predict that this will reduce electricity demand at our Angus Smith Building by more than **5%** - saving money as well as emissions.



Spotlight on: Reducing our business car mileage

Some car travel is necessary, particularly for site monitoring and inspections. But for many journeys, such as travelling between offices, we can use alternatives. Since 2010, we have set targets to reduce impacts from our travel. The largest contribution in this area is from business car mileage stemming from private cars used for SEPA business. We have achieved significant reductions through the use of a travel hierarchy which

recommends alternatives to travel such as video and web based conferencing; and increasing the availability of lower carbon pool vehicles. Last year our business car mileage dropped by **12.4%** compared to the year before. Overall, it has reduced from **2.9** million miles in 2009-2010 to fewer than **1.4** million miles last year, a reduction of **52%**.

21. Zero Waste Targets

No more than 5% of all SEPA waste to be consigned to landfill by 2025.

What difference have we made?
We're monitoring our waste and making efforts to prevent, reduce, reuse and recycle it.

This target is aimed at reducing our environmental impact, and contributing to the national Zero Waste targets. We have maintained progress in meeting this target.

The amount of waste going to landfill has averaged 12.7% this year, a slight increase compared to last year. Office moves have created temporary spikes in waste levels which have affected the figures for waste diverted from landfill.

In 2015-2016 SEPA generated 202 tonnes of waste. This is a reduction of 18% compared to last year. Of this, we recycled 67%.

Using a carbon waste metric developed by Zero Waste Scotland, we have calculated that our recycling activities prevented 92 tonnes of CO₂e being released to the atmosphere last year.

Our Green Network is vital in delivering our waste targets. With the help of our facilities staff and waste contractors, they are responsible for co-ordinating the segregation of recyclables; conducting local waste audits to check progress; and improving segregation to increase the range of waste materials we can either avoid producing or can recycle.

Waste generated and composition 2015-2016

Waste	Tonnes
Total generated	202.3
Landfill	25.6
MRF/EFW ¹	41.1
Paper	74.0
Cardboard	3.3
Mixed recyclables	28.7
Glass	15.2
Cans	0.6
Plastic	3.1
WEEE ²	2.7
Batteries	0.1
Food	6.5
Other	1.4
Recycled	67%
Landfill Avoidance	87%
¹ MRF/EFW = Materials Recycling Facility/Energy From Waste	
² WEEE = Waste Electronic and Electrical Equipment	

Spotlight on recycling: Green waste

Our Angus Smith Building generates 80kg of green waste per week - equivalent to a busy restaurant. When we first moved in, no commercial collection service was available and, rather than send the waste to landfill, our staff trialled various methods to compost green and food wastes including green cones and rotary composters. This was a successful stop gap but in 2015 a commercial service became available and green waste is now sent for anaerobic digestion to produce both a useful fuel and compost mulch that can be reused. Last year more than two and a half tonnes of waste were diverted from landfill. Similarly, in our Arbroath office, 140kg of green waste was uplifted for composting through the year.

Meanwhile Dingwall staff have developed and maintained recycling and compost records for almost ten years. This allows us to track long term progress and to demonstrate to other organisations what is possible.

Did You Know? Glenrothes staff reduced paper consumption by a third by avoiding printing documents for meetings.

Did You Know? As part of the move to share a new office with Scottish Natural Heritage in Newton Stewart we reused desks and storage that were left over from our Perth estate modernisation.

Biodiversity and outreach activities

All our offices with grounds have an up-to-date biodiversity action plan and our Green Network have worked hard to implement them. Stirling office created a stunning display of wildflowers. The full beauty of the flowers was captured for posterity and is incorporated into the décor of the office, as part of two meeting rooms and in the sign at reception. Our offices also continue to provide spaces for wildlife. We have 12 offices now supporting wildflower areas. Breeding birds are taking advantage of the nest boxes and habitats we have created.



New hedging – provided by the Woodland Trust - has been planted at our Glasgow, Aberdeen and Perth offices, providing welcome shelter and food for wildlife. We have also participated in tree-planting on the Raploch estate near the Stirling office.



Staff at many offices have organised litter picks on land near our buildings, often with neighbouring businesses. Litter picks improve the look of the area, recover waste materials that can be recycled, and help communities to enjoy their local environment. In Glenrothes, for example, eight staff participated over three days and collected 33kg of litter, a significant proportion of which was able to be recycled.

Our staff continue to collect redundant lab materials and IT equipment that have reached the end of their useful life with us. Staff give up their own time to collect, clean and check the materials before packaging them and donating them to the Glasgow Lord Provost's [Malawi Fund](#) where these items are reused.

22. Organisational Efficiencies

Deliver organisational efficiencies of at least 3%.

**What difference have we made?
We're delivering excellent services at a lower cost**

The Scottish Government sets efficiency savings targets for public bodies each year. We have to show how we will make these savings in order to achieve a balanced budget in future years.

After a series of meetings with the Agency Management Team and senior managers, enough efficiencies have been found for us to balance the 2016-2017 budget. Sufficient savings have now been identified to close the gap between projected income and spending.

The total savings needed exceeded the 3% expected efficiency saving set by the Scottish Government. This is because the Grant in Aid allocation for 2016-2017 will be 6.8% lower than that received in 2015-2016.

A balanced budget was approved by the Board in February 2016. Savings are coming from a voluntary severance programme and other budget reductions.

23. Cost Recovery

Achieve 99% cost recovery across our charging schemes.

**What difference have we made?
We're making sure that the costs of our regulatory activities are covered by the charges licence holders pay, instead of being paid from our Grant in Aid income**

We have a responsibility to ensure that all relevant costs of regulatory activities are recovered through charges. This measure records our ability to recover the costs of regulation through our charging schemes.

The figures for the financial year to March 2016 show we achieved 99% cost recovery on our charging schemes.

2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
94%	96%	95%	96%	98%	99%

24. Licence Determination

Work with operators to determine at least 96% of applications within statutory timescales.

What difference have we made?

We've made sure that businesses which apply for a licence don't have to wait too long to know whether or not they are successful

We want to ensure that we process applications¹² within the statutory timescales so that businesses can comply with environmental legislation. The statutory timescales for determining Waste Exemptions is 21 days, Controlled Activities Regulations (Registrations) is 30 days, Pollution Prevention and Control Part B (Deemed Applications) is 12 months. For all others reported below, the statutory timescale for processing an application is four months.

Over the year 98% of applications were processed within the relevant statutory timescale.

2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Achieved (target 96%)	Achieved (target 96%)	Achieved (target 96%)	Achieved (target 96%)	Achieved (target 96%)	Achieved (target 96%)

25. Environmental Incident Reports

Respond to 96% of environmental incidents and pollution reports within 24 hours.

What difference have we made?

We've responded promptly to people who reported pollution to us

When members of the public are helping us in our work, we want to respond promptly to them. This includes responding quickly to people who report environmental incidents and pollution to us.

Over the year we received 6,277 notifications and responded to 6,150 (98%) within 24 hours, exceeding our target of 96%.

2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Achieved (target 95%)	Achieved (target 95%)	Achieved (target 95%)	Achieved (target 95%)	Achieved (target 96%)	Achieved (target 96%)

¹² Applications are registrations, permits, authorisations and licences excluding Radioactive Substances Act Band A nuclear site applications.

26. Major and Significant Environmental Events

Respond to all significant and major environmental events within 12 hours.

What difference have we made?

We've made sure that when we hear about a major environmental incident we respond promptly

This measure records the time it takes us to acknowledge receipt of notification of major and significant environmental events (known as category 1 or 2 events). We achieved this target as we responded to all 117 category 1 and 2 events within 12 hours.

27. Development Plans and SEA Consultations

Respond to 100% of formal development plan consultations and Strategic Environmental Assessment consultations within agreed timescales.

What difference have we made?

We've made sure that environmental considerations are included in formal development plan consultations and that strategic environmental assessments have been completed properly. We've responded on time.

The Scottish Government has clearly indicated the importance of the planning system to support economic growth and the role of the development plan in this process ([Planning Reform: The Next Steps, March 2012](#)). We are a key agency under the Planning etc. (Scotland) Act 2006 and a statutory consultee within the land use planning system. Our engagement in development plans is one of our key planning priorities. We receive around 200 consultations on development plans per year. By involvement at an early stage, we can ensure protection of the environment is given adequate consideration in the development plan, saving unnecessary delays to planning applications later on.

Strategic environmental assessment is a systematic process for identifying, reporting, mitigating and monitoring environmental effects of plans, programmes and strategies. It aims to ensure that environmental issues are taken into account at every stage in their preparation, implementation, monitoring and review. Under the Environmental Assessment (Scotland) Act 2005 we have a statutory duty, as a Consultation Authority to provide advice to those undertaking strategic environmental assessments. We respond to approximately 300 strategic environmental assessment consultations each year.

We responded to all consultations on time over the year. We responded to 171 development plan consultations on time and another 20 within agreed extension deadlines. We responded to all 192 strategic environmental assessment consultations on time.

28. Planning Consultation

Respond to at least 95% of planning consultations within agreed timescales

What difference have we made?

We've made sure that the environment is considered in planning consultations and we've responded as quickly as we can

Local authorities, the Scottish Government and other agencies consult us about planning applications that range from the building of individual houses to power stations and windfarms. We provide standing advice, which local authorities can use when a development has a low level of risk, but we encourage consultation where the issues are more complex. We also provide advice on environmental issues such as flooding, air quality, issues with sustainable waste management and the water environment.

The standard consultation timescale is ten working days but when complex proposals are received we will request an extension to allow us to provide a full response. Sometimes this will include holding a meeting with the developer to gain a better understanding of the proposal.

For the 4,000 or more planning consultations received each year, we aim to reply in the time given to us by local planning authorities and other bodies. This year we responded to 96% in time (including extensions). In total 3,700 consultations were completed on time, another 417 were completed on time after agreed extensions and 168 were late.

2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
93%	90%	97%	98%	97%	96%

Our Strategic Role in Planning

Our role in strategic environmental assessment and the planning system gives us an opportunity to build consensus with local authorities and other agencies to protect and enhance the environment. Our role compliments our regulatory role, but does not duplicate it. We deal with a wide range of strategic environmental assessments on plans, policies and strategies, plus development plans and planning applications from housing developments to large scale energy and infrastructure developments.

Our input to Strategic and Local Development Plans continues to be our highest planning priority and our new [development planning guidance](#) focusses our advice on flooding, the water environment, sustainable resource use, soils and air quality. Our statutory duty as a Consultation Authority for strategic environmental assessment ensures we must be consulted on all plans, programmes and strategies of a public nature, including both local and national government planning. We publish [guidance](#) on air, soil, and water, and the drafting of guidance on built and natural assets and human health. Increasingly we are looking at our role in climate change and how we can achieve low carbon developments by promoting the use of waste heat, district heating networks and other emerging technologies.



Over the last year key developments or projects have included:

- The dualling of both the A9 and A96, where we provided expert advice on the project and the subsequent detailed design work to Transport Scotland and their consultants. We established a single point of contact within SEPA for all involved. We intend to replicate this successful model for future strategic infrastructure projects.
- Working with renewable companies to produce more streamlined and proportionate environmental assessments, following success with this approach for hydro schemes (as recognised by the Scottish Government and the renewables industry).
- Collaboration with others such as Scottish Natural Heritage and Marine Scotland to improve our joint guidance and promote development in the right place.
- Working with the Scottish Government on the Longannet Taskforce, assisting development of a multi-agency plan to mitigate the economic impact of Longannet's closure.

29. Official and Ministerial Enquiries and Third Party Consultations

Respond to at least 90% of formal third party consultations and Official and Ministerial Enquiries within agreed timescales.

What difference have we made?

We've helped ensure that the environment is considered in policy, plans and regulations. We've ensured that politicians and their staff have the environmental information they need when they need it.

We are regularly asked to comment on a formal basis on a wide range of issues and publications by external organisations. These can range from commenting on draft reports, to providing input to proposals for legislation and regulations. We have business procedures that provide a coordinated and consistent approach to responding to these consultations.

Official and Ministerial Enquiries are interactions with a variety of bodies. These include: Government seeking information for Ministers; direct enquiries from Ministers; members of the Scottish, UK or European Parliaments (including individual politicians or their staff); leaders or chief executives of local authorities; and staff from the Scottish or UK Parliaments, for example members of SPICe (the Scottish Parliament Information Centre) or committee clerks. Over the last five years we have received about 330 enquiries a year.

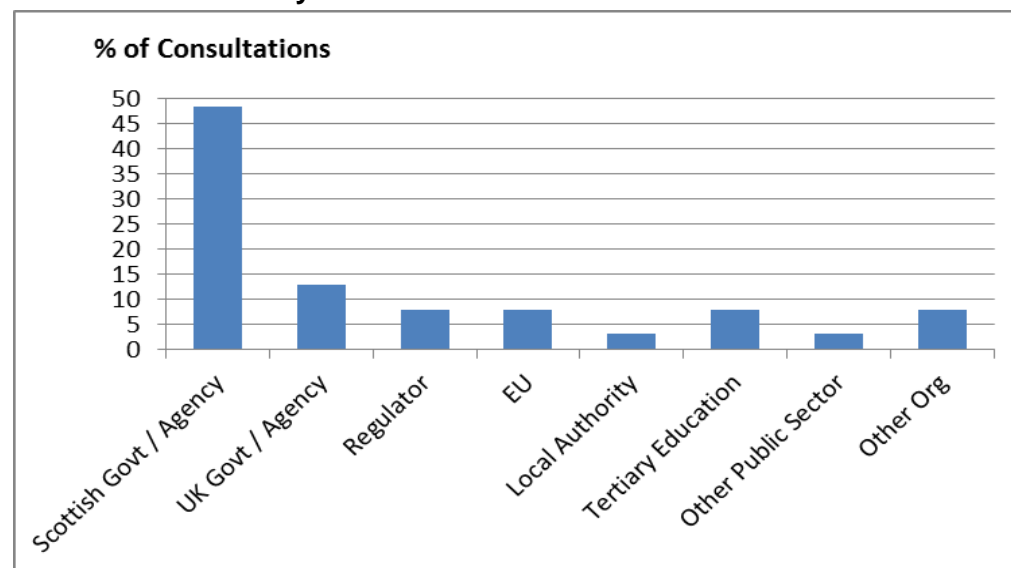
We achieved the target as for both formal third party consultations and Official and Ministerial Enquiries we responded within agreed timescales well over 90% of the time through the year.

Third Party Consultations

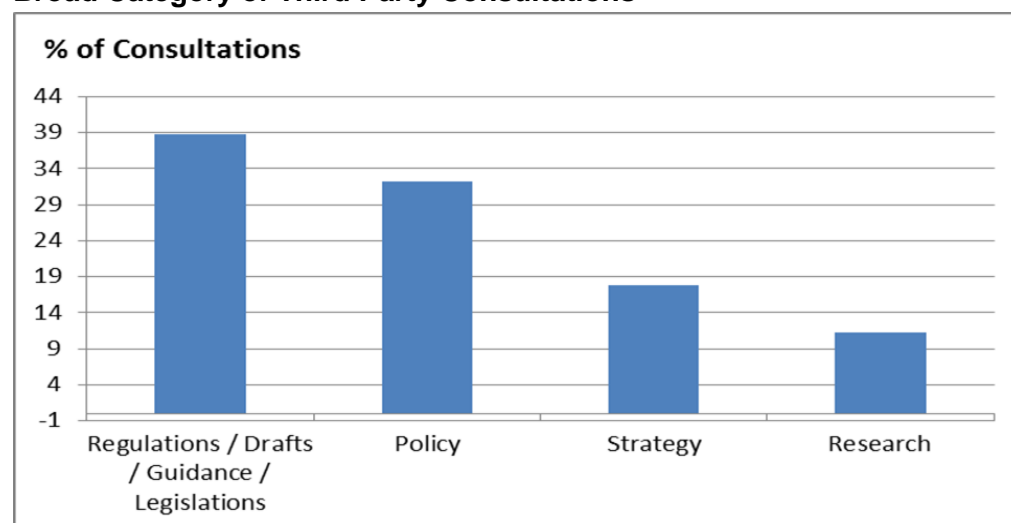
We responded to 59 third party consultations and 58 (98%) were responded to within agreed timescales. These consultations were issued by a diverse range of organisations (see below). However, the largest percentage of consultations came from the Scottish Government and its agencies.

The nature of consultations can broadly be categorised as research, strategy, policy and legislation/guidance/regulation. The largest proportion relate to this last category of legislation, guidance and regulations (including drafts).

Source of Third Party Consultations



Broad Category of Third Party Consultations

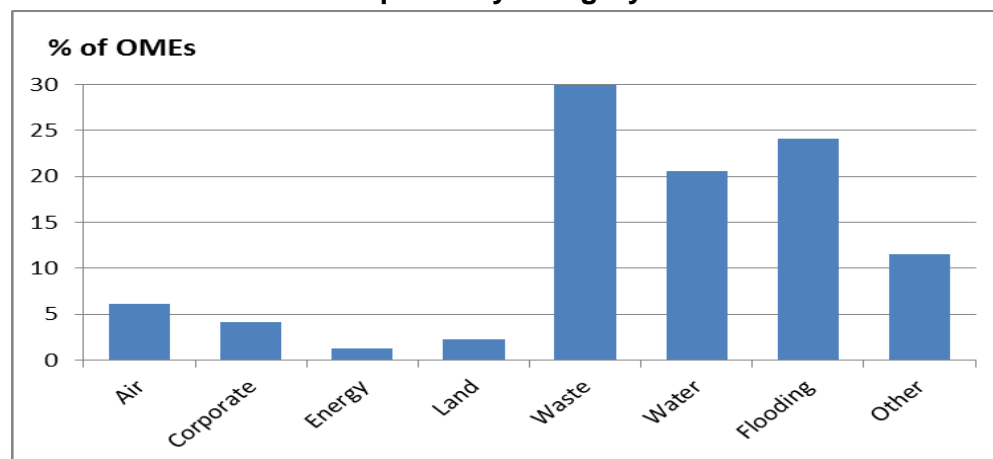


Official and Ministerial Enquires

Over the year, we responded to 309 Official and Ministerial Enquiries, with 291 (94%) meeting agreed timescales.

- Over half of enquiries in 2015-2016 came from members of the Scottish Parliament;
- Waste, water and flooding are the most significant categories - they constituted around 75% of all enquiries, similar to previous years.

Official and Ministerial Enquiries by Category



30. Maintain High Levels of Staff Engagement

Maintain high levels of staff engagement.

What difference have we made?

We've attracted and retained excellent, engaged staff

We have been measuring staff engagement using the Engagement Index of our internal staff survey. The Index includes various indicators such as employees' positive communication about SEPA to third parties; employees' intention to continue working for SEPA in the foreseeable future; and employee commitment levels to their job. The external company conducting the staff survey uses an industry wide standard for staff engagement, allowing benchmarking against other organisations. We had a very high Engagement Index score in previous surveys: 75% in the 2011, which increased further to 79% in 2013.

This target has been achieved as this year's survey showed our Engagement Index score has been maintained at the same level as recorded in the previous survey two years before. The score of 79% compares favourably with the stated benchmark¹³ for the public sector in Scotland of 69%.

¹³ The public sector benchmarking figures are based on BMG Research's own database of results from more than 60 public sector organisations, including local authorities, housing associations, police forces, central government departments etc.

The survey took place in November and December 2015. Almost 90% of the questions were the same as those used in the 2013 survey, allowing us to compare results and to monitor the success of our People Strategy. We received over a thousand responses, pushing up the response rate to an impressive 78%, an increase of 3% on the 2013 figure of 75%.

Staff survey – 2015

The Engagement Index is an average of seven separate questions which can be grouped into three categories: the extent to which employees communicate positively about working at SEPA (Say); a measure of whether employees intend to stay at SEPA (Stay); and an indication of commitment levels to SEPA (Strive or willingness to go the “extra mile” when required).

Engagement questions for the Engagement Index score

Say	Stay	Strive
I am proud to work for SEPA	I intend to still be working for SEPA in 12 months time	I really care about the future of my organisation
I would recommend this organisation as a great place to work		I am happy to go the 'extra mile' at work when required
I would speak positively about environmental issues outside of work		Working here makes me want to do the best work

We continue to score very highly in such areas as how interesting we find our work, awareness of training opportunities, health and safety issues and willingness in going the “extra mile” when required - all supported by a remarkable 90% or more of responses. More than three-quarters of staff now believe they are able to strike the right balance between work and home. The lowest scoring sections in the survey were similar to the previous survey. These included effective communication between portfolios and dealing with poor performance. We recognise improvement is required in these areas.

During the year SEPA became an accredited Scottish Living Wage employer. By achieving this accreditation it has enabled us to be recognised for paying our staff and third party contracted staff a fair and decent wage. This should allow us to continue to attract high quality job candidates, and have a positive impact on our employee engagement levels and the overall quality of the work we do.

We also gained the [Two Tick Accreditation](#) from Jobcentre Plus during the year. This recognises those employers who have agreed to take action to meet five specific commitments regarding the employment, retention, training and career development of disabled employees. It authorises these employers to display the two ticks symbol.



We continue to embed all aspects of equality into our work, both internally and externally. Under the [Equality Act 2010 \(Specific Duties\) \(Scotland\) Regulations 2012](#) we have a statutory duty to report formally every two years our progress on our published equality outcomes and mainstreaming equality. More details are available in our latest mainstreaming report released in [April 2015](#) and our [Annual Update 2015-2016](#) which gives the latest detail on areas such as demographics, women in leadership and access arrangements within SEPA.

Healthy Working Lives

Following annual assessment by Health Scotland in October 2015, it has been confirmed that SEPA has retained the Healthy Working Lives Silver Award. To maintain the award we had to demonstrate that:

- organisationally, we continue to meet the requirements of both the Bronze and Silver levels;
- we can evidence both awareness raising and participation in activities and opportunities to promote the six key criteria for the Silver Award;
- we can show how these contribute to the organisation.

The assessor felt that we could demonstrate a strong commitment to supporting and empowering health, safety and wellbeing and that a wide range of activities and information had been taken forward. Our involvement in the Healthy Working Lives programme is an important part of our commitment to continuing to build a healthy working environment. We believe that retaining the award will have a positive impact on employee engagement and wellbeing.

3. Accountability report

3.1 Directors report

Introduction

The Board of the Scottish Environment Protection Agency (SEPA) presents its Annual Report and Accounts for the year from 1 April 2015 to 31 March 2016. The accounts have been prepared in a form directed by the Scottish Ministers, in accordance with Section 45 subsections (1) and (2) of the Environment Act 1995.

Statutory background

SEPA was established as a non-departmental public body (NDPB) and we are required to fulfil our functions as set out by relevant provisions of the Environment Act 1995.

Principal activities

Our primary purpose defined in the Environment Act 1995, is to protect and improve the environment, including the sustainable management of natural resources. We must also, except to the extent that it would be incompatible with our primary purpose to do so, contribute to improving the health and wellbeing of people in Scotland and achieving sustainable economic growth.

Finance overview

Our 2015-2016 Annual Operating Plan described our priorities for the year, and the 30 performance measures we use to monitor our success. All 30 of these measures were achieved. The performance report provides detailed analysis of our achievements in 2015-2016.

The most significant financial risks that SEPA will need to manage in the next five years relate to future levels of income from Grant in Aid (GiA) and the new charging scheme. The financial model assumes both GiA and charging scheme income to be of the same magnitude as that budgeted in 2015-2016.

We expect to maintain the basic structure of our current pay scheme for the foreseeable future and we will follow Scottish Government guidance regarding future pay increases. Inflationary pay increases have been set at 1% for 2016-2017 and staff pay will increase by the annual progression steps that are set out within the current pay scheme. Employer's superannuation contribution rate has been agreed at 19% for the three years 2015-2018.

SEPA, like every other government body, is expected to deliver best value and achieve efficiency savings. The Scottish Government has an expectation that we will make efficiency savings for 2015-2016 of at least 3%. To ensure a balanced budget for 2015-2016 we identified £1,254,669 savings that were removed from base budgets at 1 April 2015. This equated to 3.6% of cash GiA received to cover operating costs. It is expected we will have to identify savings of this magnitude each year.

Accounting for pension costs (International Accounting Standard 19) will continue to cause unpredictable movements on our net assets employed through fluctuations in market conditions and underlying assumptions. From 1 April 2015, Local Government Pension Scheme (LGPS) pensions are now being earned on a career average basis.

Our liabilities, falling due in future years, should be met from income derived from charging schemes and GiA. To the extent that the pension deficit is not met from SEPA's other sources of income, it may only be met by future GiA received from our sponsoring department. Our Board

has no reason to believe that such support will not be forthcoming. Given the above, it has been considered appropriate to adopt a going concern basis for the preparation of these annual accounts.

Financial performance

For the year to 31 March 2016, the excess expenditure over income shown in the Statement of Comprehensive Net Expenditure of £44,473,000 (2014-2015: £43,116,000) was financed by Scottish Government Grant in Aid (GiA). GiA is taken directly to the Comprehensive Net Expenditure Reserve.

The Financial Reporting Manual (FReM 2015-2016) issued by HM Treasury specifies the format of our annual accounts. GiA is included in the Comprehensive Net Expenditure Reserve in the statement of financial position rather than included in the Statement of Comprehensive Net Expenditure for the year. All other income and expenditure is included in the Statement of Comprehensive Net Expenditure. The in-year deficit is transferred to the Comprehensive Net Expenditure Reserve and is funded by GiA held there.

Total funding received for charging and other income, increased by £1,050,000 (2.5%) in 2015-2016. The increase consisted of £1,051,000 for charging scheme fees offset by a reduction in other income of £1,000. An uplift in fees accounted for the bulk of the increase in charging scheme income.

There was a decrease in GiA funding of £321,000 in 2015-2016. This was made up of a reduction of £785,000 in capital investment funding, offset by increases in non-cash funding of £42,000 and operating cost funds of £422,000. SEPA did not utilise all the cash available to it in 2015-2016. £1,600,000 remained with the Scottish Government at 31 March 2016.

Total operating expenditure increased by £2,244,000 (2.7%) during the year. The main components of this were: increases in staff costs of £2,931,000 and property costs of £418,000, offset by a reduction in transport costs of £382,000, and supplies and services costs of £707,000. There were also other small movements that reduced costs by £16,000.

The increase in staff costs of £2,931,000 (5.2%) reflected in note 5 of the accounts is made up of an increase in payroll costs of £2,579,000; an increase in pensions costs under International Accounting Standard 19 (IAS 19) of £470,000; less a reduction in other staff costs of £118,000. The increase in payroll costs of £2,579,000 includes the cost of a voluntary severance scheme run in year of £1,678,340, as well as inflationary and incremental progression salary increases for the year. The voluntary severance scheme resulted in 38 staff agreeing to leave SEPA - 35 staff left by 31 March 2016 and three will leave in quarter one of 2016-17. The overall headcount reduced by 45 in year. Additionally, SEPA had an increase in superannuation costs as a result of the employer's superannuation contribution rising by 1% to 19%.

Our statement of financial position shows net liabilities of £21,802,000 (2014-2015: £52,108,000). The accounts have been prepared on a going concern basis, as it is expected that all future liabilities not met from income generated by SEPA will be met by future GiA as they fall due.

We undertook a desk top valuation of our land and buildings and had the Sir John Murray (vessel) professionally valued during the year. Estimated market values of land and buildings in operational use reduced by £1,345,000 in year; additionally, there was a net reduction in value of properties held for sale of £450,000 in year. The value of the vessel was £940,000, which is consistent with the depreciated book value of the asset.

The only specialised buildings we own are gauging stations. Their asset values at 31 March 2016 have been indexed as proxy for fair value. This has resulted in a net decrease in their value of £120,583.

Following the valuation of pension scheme assets and liabilities at 31 March 2016, the pension scheme deficit has been decreased to £46,486,000 (2014-2015: £80,957,000). The main reason for decrease in the deficit is the change to discount rates applied to scheme liabilities. Notes 19, 20 and 21 provide additional information.

In 2015-2016, the charging schemes achieved 99% cost recovery (note 23) against an Annual Operating Plan target of 99%.

We had a net cash outflow of £189,000 (2014-2015: in flow £197,000) during the year.

We received 48% of our operating income from Scottish Government GiA and generated the other 52% of our income from charging schemes and other income. There is not considered to be any significant liquidity or credit risk exposure due to credit controls in place. Our financial instruments comprise trade and other receivables, trade and other payables, cash and liquid resources. Trade receivables and payables are both held at fair value. Any cash held in accounts is with highly rated banks. These financial instruments are considered low risk.

We spent £1,706,000 (2014-2015: £2,494,000) on the following capital projects in year:

• IS infrastructure / resilience / software	£199,000
• Replacement of various items of scientific equipment	£1,177,000
• Property refurbishment costs	£330,000

Performance against sponsor directorate financial targets 2015-2016

Scottish Government provides a budget and cash allocation for the year, which originates from the spending review settlement and is subsequently approved in the Budget Bill. During the year, revisions are approved in the autumn and spring budget, as agreed with Scottish Government.

For the year 2015-2016, the operating resource budget was £40,098,000 (2014-2015: £40,419,000) and we incurred £40,087,000 expenditure against this limit, an underspend of £11,000.

We are also allocated an Annually Managed Expenditure (AME) budget limit of £6,210,000 (2014-2015: £6,400,000) for 2015-2016. The actual IAS 19 pension's adjustments, provisions movements and market value reductions for fixed assets in year amounted to £7,746,000.

Note 24 provides a summary of the outturn for 2015-2016 against the Scottish Government targets for the year.

Financial performance against corporate plan in 2015-2016

The Annual Operating Plan (AOP) for 2015-2016 provided the foundation for all our planning for the year. It sets out how resources are allocated across business priorities. The annual budget based on the AOP was then agreed with the Scottish Government.

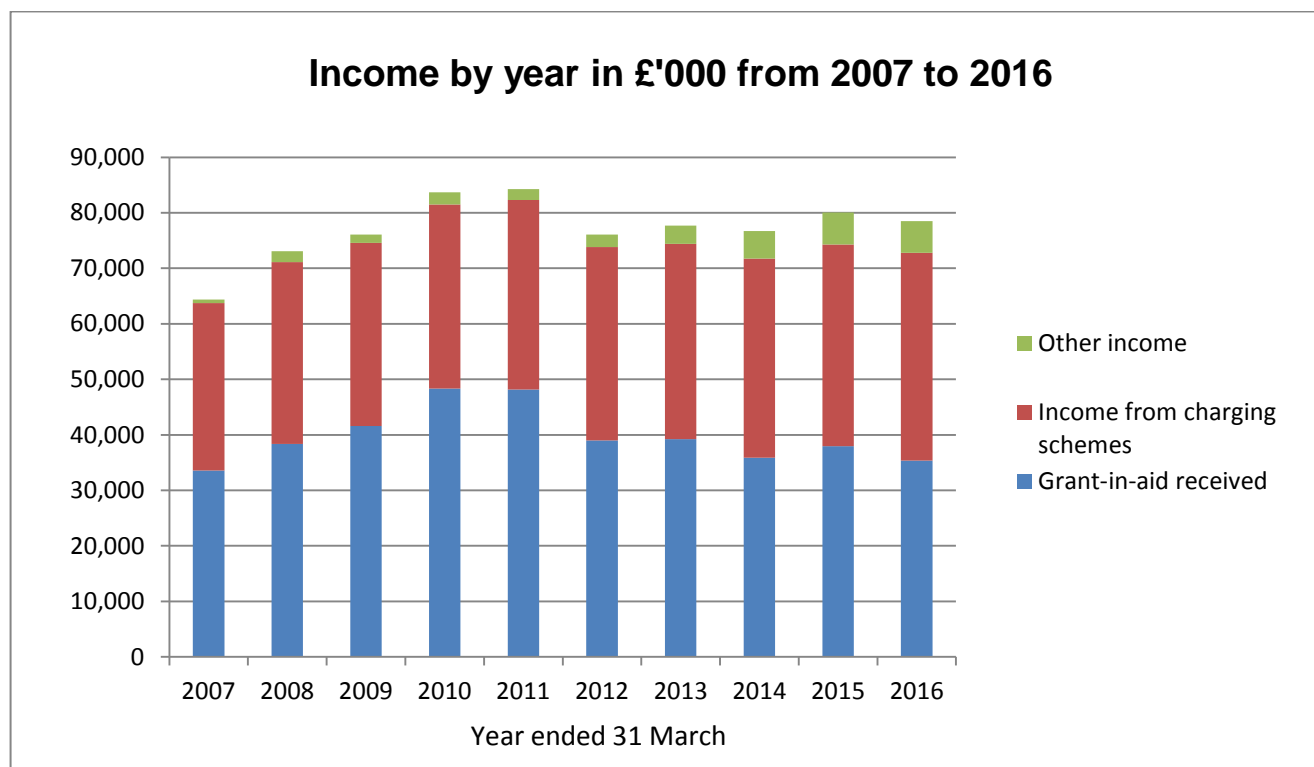
Income received from all sources exceeded the plan by £4,036,000. GiA received from the Scottish Government was £288,000 more than planned, and other income exceeded the plan by £3,877,000. This additional income was offset by a reduction in charging schemes income of £129,000.

When preparing the budget for other income, a conservative view of the work likely to be undertaken at cost for other public sector bodies was taken. Other income was planned at £1,368,000, excluding EU Life income. The actual income for the year was £5,260,000, an increase of £3,892,000.

The main sources of this additional income was Scottish Government £3,546,000 for Water improvement projects and Revenue Scotland £780,000 for the support provided to administer Scottish Landfill tax and the associated Scottish Landfill Communities Fund.

The operating expenditure approved in the budget excludes adjustments for pensions under IAS19. The actual expenditure, excluding IAS19 adjustments of £6,090,000, was £83,161,000 compared to the approved budget of £77,598,000; expenditure was £5,563,000 greater than approved in the annual budget.

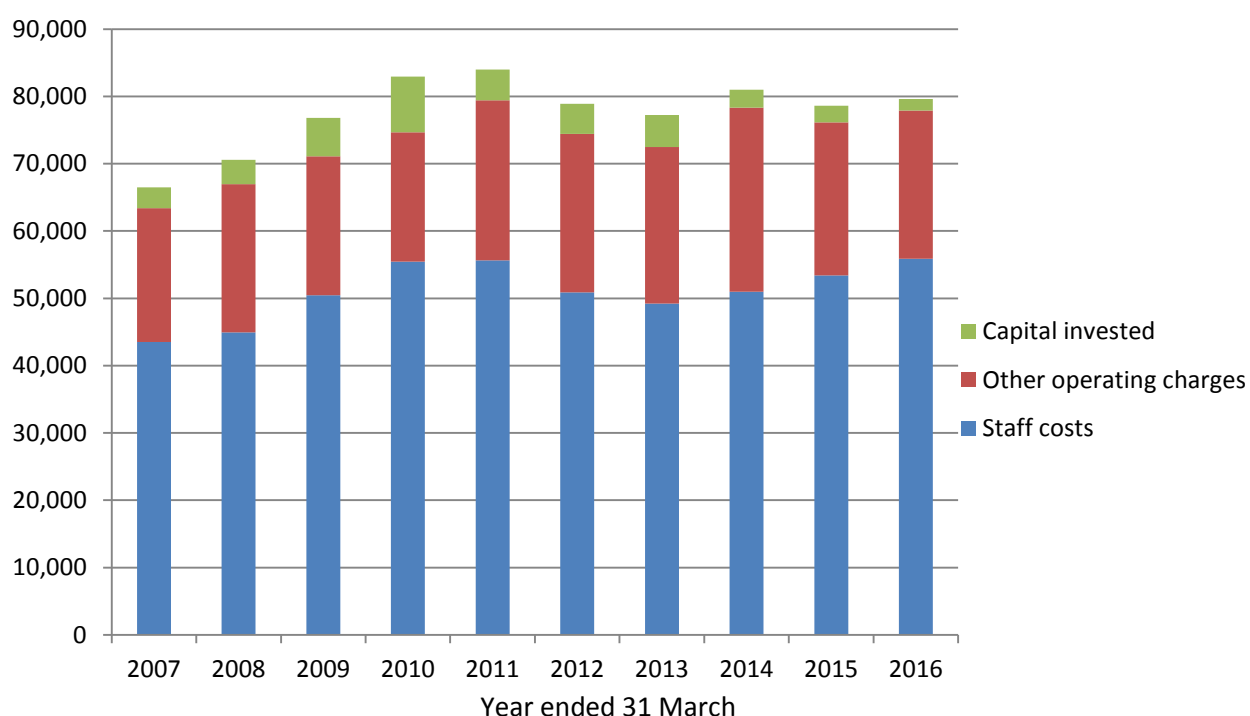
Financial trends 2007-2016



Year to 31 March	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Grant-in-aid received	33,566	38,345	41,596	48,346	48,188	39,010	39,249	35,910	37,969	35,378
Income from charging schemes	30,152	32,787	32,967	33,150	34,133	34,830	35,151	35,843	36,340	37,391
Other income	664	1,972	1,525	2,221	1,928	2,248	3,280	4,938	5,729	5,728
Total Income	64,382	73,104	76,088	83,717	84,249	76,088	77,680	76,691	80,038	78,497

GiA has increased by £1,812,000 for the year 2015-2016 over that received in 2006-2007. In this period, SEPA has developed the flood warning and dissemination services and the Scottish flood forecasting centre. Charging scheme income has increased by £7,239,000 from 2007 to that received in 2016. Other income increased by £5,064,000. These trends reflect the growth of the charging schemes and other services we provide over this period.

Expenditure by year - £'000 from 2007 to 2016



Year to 31 March	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Staff costs	43,537	44,952	50,466	55,437	55,628	50,913	49,239	51,002	53,400	55,862
Other operating charges	19,886	21,998	20,653	19,222	23,804	23,501	23,225	27,328	22,751	22,030
Capital invested	3,070	3,652	5,702	8,311	4,564	4,497	4,772	2,692	2,494	1,706
Total Expenditure	66,493	70,602	76,821	82,970	83,996	78,911	77,236	81,022	78,645	79,598

The table above shows the main expenditure items. Staff costs reflect the payroll and employers costs for the year (excluding IAS pension adjustments); other operating costs include all costs associated with our operations (property costs, travel, supplies and services etc., excluding depreciation) and capital invested refers to the amounts that have been spent on new non-current assets such as buildings, replacement plant and equipment. By far the largest expenditure item is staff costs. In 2016 this was £12,325,000 more than in 2007. Other operating costs have increased by £2,144,000. The grants administered in 2016 amounted to £1,531,799 and directly commissioned hydromorphology work totalling £800,000 was undertaken in 2016. If these costs are removed, non-staff operating costs have reduced by £187,799 since 2007.

Other information

We are required to note the following items for information purposes:

- I. Twenty quaichs were gifted to long serving staff who left the organisation. Additionally, 11 pen sets were gifted to staff.
- II. At 31 March 2016, we held an accumulated provision of £96,607 (2014-2015: £244,310) for write off and impairment of debts, and the level of outstanding debt was £1,217,396 -

this is £323,440 less than at 31 March 2015. During the year 2015-2016, £147,564 (2014-2015: £186,171) of bad debts were written off or impaired through operating costs in the Statement of Comprehensive Net expenditure for the year. This represents 0.4% of charging scheme income.

- III. There was £46,415 (2014-2015: £12,851) worth of losses due to theft and loss of equipment and damage to items. Additionally a number of SEPA's gauging stations suffered storm damage this year. The estimated cost of repair work to these facilities was £325,000. SEPA is self-insured and has to meet these costs.
- IV. In the year to 31 March 2016, SEPA investigated 13 Security Incidents relating to the loss of data/information. SEPA submitted a Data Breach Notification to the Information Commissioners Office (ICO) regarding the loss of unencrypted discs. After an investigation, the ICO required SEPA to prepare an Improvement Plan. The plan was submitted within the timescale and was approved by the ICO.
- V. There were no frauds discovered in 2015-2016 (2014-2015: none) however, during the year there was:
 - Investigation into financial phishing email.
 - Four allegations of bribery and corruption were reported in relation to staff conduct.
 - One allegation of forgery against a SEPA employee.

All of these matters were investigated. No evidence of wrong doing was uncovered. Actions have been taken to review and strengthen internal processes and procedures.

There were four instances of whistleblowing in 2016, all four were investigated and recommendations that arose implemented.

- VI. It is our policy to pay all small local suppliers as soon as possible, and other suppliers within 10 days from invoice date. The average time taken to pay all supplier invoices was seven days, and we paid 93% of invoices within the 10 day target and 99% of all invoices within 30 days.
- VII. Our financial system currently has the capability to function with any standard currency which may be introduced as a requirement of European Monetary Union legislation.
- VIII. Bankers

Royal Bank of Scotland
Edinburgh North
Bridge Branch
31 North Bridge
Edinburgh
EH1 1SF

Citibank N.A.
Citigroup Centre
Canada Square
Canary Wharf
London
E14 5LB

Royal Bank of Scotland
London Corporate SC
PO Box 39952
2 1/2 Devonshire Square
London
EC2M 4XJ

- IX. Independent auditors

PricewaterhouseCoopers
LLP
Chartered Accountants
and Statutory Auditors
141 Bothwell Street
Glasgow, G2 7EQ

3.2 Accountable officer's responsibilities

Under Section 45(2) of the Environment Act 1995, we are required to prepare annual accounts for each financial year in the form and on the basis determined by the Scottish Ministers. The annual accounts are prepared on an accruals basis and must give a true and fair view of the state of affairs of SEPA as at the end of the financial year, and of the income and expenditure, recognised gains and losses, and cash flows for the financial year.

In preparing the annual accounts, the Accountable Officer is required to comply with the requirements of the Financial Reporting Manual and in particular to:

- Observe the accounts direction issued by the Scottish Ministers, including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis.
- Make judgments and estimates on a reasonable basis.
- State whether applicable accounting standards as set out in the Government Financial Reporting Manual have been followed, and disclose and explain any material departures in the annual accounts.
- Prepare the annual accounts on a going concern basis.

In addition, we have general responsibility for taking such steps as are reasonably open to us to safeguard its assets and to prevent and detect fraud and other irregularities.

The Principal Accountable Officer of the Scottish Government appointed the Chief Executive as the Accountable Officer for SEPA. As Accountable Officer, the Chief Executive is responsible to the Scottish Ministers.

The Chief Executive's relevant responsibilities, as Accountable Officer for SEPA, are set out in the framework document issued in December 2014. The Accountable Officer has responsibility for the propriety and regularity of the public finances, for which they are answerable to the Scottish Parliament. The Chief Executive has responsibility for keeping proper records and for safeguarding our assets, as set out in Scottish Public Finance Manual.

3.3 Governance statement

Scope of responsibility

The Scottish Public Finance Manual (SPFM) is issued by the Scottish Ministers to provide guidance to the Scottish Government, and other relevant bodies, on the proper handling of public funds. It is designed to ensure:

- compliance with statutory and parliamentary requirements;
- value for money;
- high standards of propriety;
- effective accountability and robust systems of internal control.

As Accountable Officer, I have responsibility for maintaining sound systems of internal control which supports the achievement of the organisation's policies, aims and objectives, set by the Scottish Ministers, whilst safeguarding the public funds and assets for which I am personally responsible, in accordance with the responsibilities assigned to me, in the Scottish Public Finance Manual.

SEPA is a public body and operates in an open and accountable manner, to provide a high quality public service, based on clearly defined standards. We are committed to accessibility, openness and accountability, and aim for the highest standards in corporate governance, and the Cabinet Office guidance on codes of practice for public bodies has been adopted.

Our Corporate Office is Strathallan House, Castle Business Park, Stirling, FK9 4TZ.

Board composition and operation

Our Board currently comprises of the Chair, the Deputy Chair, eight non-executive members and the Chief Executive. Members of the Board are appointed by the Scottish Ministers. The normal term of office for a non-executive Board member is four years, although lengths of appointments may be varied to ensure continuity of Board membership. The Board has responsibility for ensuring that we fulfil our aims and objectives set by the Scottish Ministers. The roles of the Chair and Chief Executive are separated and clearly understood and the Board has delegated to me (as the Chief Executive) day-to-day management of SEPA.

The role of the Board, among other things, is to:

- establish the overall strategic direction of the organisation within the policy and resources framework agreed with Scottish Government;
- oversee the delivery of planned results by monitoring performance of the organisation against agreed objectives and targets;
- ensure that SEPA operates sound environmental policies in relation to its own operations;
- demonstrate high standards of corporate governance at all times;
- ensure that statutory requirements for the use of public funds are complied with.

The Board has agreed a policy of requiring matters to be reported to the Board for decision, unless specifically within the delegated powers given to the Chief Executive.

Board activity and corporate governance is monitored by both internal and external auditors.

Board committees

As has been reported in previous year's annual accounts, to provide for greater efficiency and more effective governance, matters previously considered by the Planning and Finance Committee and the Human Resources and Remuneration Committee are now presented to additional meetings of the Agency Board Strategy meetings. These were established from 1

January 2010, and are chaired by the Chair of the Board. Executive Directors, Chief Officers and members of SEPA staff are asked to attend meetings, when subjects of particular relevance are discussed.

The Audit Committee was established by SEPA in accordance with powers granted under Schedule 6 to the Environment Act 1995. Committee business is conducted in accordance with the SEPA Standing Orders which were approved by our Board on 12 February 2013. The Audit Committee has delegated authority from the SEPA Board, to undertake or commission work necessary to enable it to fulfill its purpose, or to take what advice, including external legal advice, it considers necessary to discharge its duties.

Audit Committee

The Chair and members of the Audit Committee are appointed by our Board. A periodic assessment of the skills of members of the Audit Committee is made by the Chair of the Audit Committee. Relevant training and development is provided for all members of the Committee. The Audit Committee has continued to monitor and review risk, controls and corporate governance, and was chaired by Bob Downes, SEPA's Deputy Chair until December 2015. Lesley Sawers was appointed to Chair of the Audit Committee in March 2016. The Committee currently comprises of six non-executive members (including the Chair of the Audit Committee) and meets four times a year. The external and internal auditors attend all meetings, and are given the opportunity to speak confidentially to the committee members. The Audit Committee operates independently, and reports to the Board.

The Audit Committee's primary responsibilities include:

- making regular reports and a formal annual report to the Board;
- acting on behalf of the Board in overseeing the work of the Standards Officer;
- advising the Board on its compliance with corporate governance requirements and good practice guidance;
- establishing and overseeing a review process for evaluating the effectiveness of risk management arrangements;
- overseeing processes for securing the efficient and effective use of resources.

The Audit Committee:

- advises the Board on the selection, appointment or re-appointment and remuneration of the internal audit service provider;
- reviews the scope, efficiency and effectiveness of the work of internal audit;
- advises the Board of the Audit Committee's approval of the internal audit strategic and operational audit plans;
- considers salient issues arising from internal audit reports;
- considers progress reports and management responses to audit findings and monitors management action on the implementation of agreed recommendations;
- advises the Board on the remuneration of the external auditors;
- considers the annual accounts and reviews the appropriateness of the accounting policies adopted in their preparation;
- reviews the external audit strategy and plan;
- considers the external auditor's annual report and management letter;
- monitors action on the implementation of the agreed recommendations.

Board members

The biographies and interests of Board members can be found on our website at: www.sepa.org.uk/about_us/sepa_board/members.aspx

Agency Board meetings attended by members in the year 1 April 2015 to 31 March 2016

Member	Number of meetings attended in year	
D Sigsworth (Chair) – resigned 31 December 2015	5	(5 possible)
B Downes (Deputy Chair) – to 31 December 2015, appointed Chair 1 January 2016	6	(6 possible)
J Curran (Chief Executive) – resigned 12 April 2015	0	(0 possible)
T A'Hearn (Chief Executive) – appointed 13 April 2015	6	(6 possible)
R Dixon	5	(6 possible)
W McKelvey	5	(6 possible)
K Nicholson	5	(6 possible)
L Sawers	6	(6 possible)
M Francis	6	(6 possible)
J Hyland	5	(6 possible)
N Martin	6	(6 possible)
T McAuley - resigned 18 April 2016	5	(5 possible)
M Hill – appointed 1 January 2016	1	(1 possible)
F van Dijk – appointed 30 March 2016	-	(- possible)

Agency Board members carry out non-executive engagement with customers, partners and stakeholders. Verbal or written reports of engagement activity are provided at each subsequent Board or Board Strategy meeting to ensure that the activity is noted for the public record and to give members and management the opportunity to discuss issues recorded at, or arising from, the activity. For more information go to: www.sepa.org.uk/about-us/how-we-work/our-board/

Audit Committee meetings attended by members in the year from 1 April 2015 to 31 March 2016

Member	Number of meetings attended in year	
B Downes (Chair) - resigned 5 March 2016	3	(3 possible)
R Dixon	2	(4 possible)
K Nicholson	4	(4 possible)
W McKelvey	3	(4 possible)
N Martin	4	(4 possible)
T McAuley - resigned 18 April 2016	4	(4 possible)
L Sawers (Chair) – appointed 6 March 2016	1	(1 possible)

Strategy Board meetings attended by members in the year from 1 April 2015 to 31 March 2016

Member	Number of meetings attended in year	
D Sigsworth (Chair) – resigned 31 December 2015	3	(3 possible)
B Downes (Deputy Chair) resigned 31 December 2015 appointed Chair 1 January 2016	4	(4 possible)
J Curran (Chief Executive) – resigned 12 April 2015	0	(0 possible)
T A'Hearn (Chief Executive) – appointed 13 April 2015	4	(4 possible)
R Dixon	3	(4 possible)
W McKelvey	4	(4 possible)
K Nicholson	1	(4 possible)
L Sawers	4	(4 possible)
M Francis	4	(4 possible)
J Hyland	4	(4 possible)
N Martin	4	(4 possible)
T McAuley	1	(3 possible)
M Hill – appointed – 1 January 2016	1	(1 possible)
F van Dijk – appointed 30 March 2016	-	(- possible)

Additionally, individual Board members support and represent SEPA in a number of its activities. Board members act as “Board Buddies” supporting senior managers undertaking high profile work such as the single change programme, estates strategy, climate change issues and our digital strategy, as well as providing mentoring support for a number of senior staff. Several Board members regularly speak on behalf of SEPA at conferences and stakeholder events such as the VIBES awards and external conferences. Board members are sent a monthly calendar of potential engagement opportunities which includes conferences and meetings of stakeholder groups and from this list, Board members volunteer to attend events on behalf of SEPA and report back to the Agency Board.

SEPA Executive Directors and Chief Officers 2015 - 2016

SEPA's Executive Directors are:

Name	Post
J Curran MBE BA BSc PhD MInstP FRMetS C Met CPhys C Eng – resigned 12 April 2015	Chief Executive and Accountable Officer
T A'Hearn BCom (Hons) BA - appointed 13 April 2015	Chief Executive and Accountable Officer
D Pirie BSc PhD CChem MRSC	Executive Director (Science and Strategy Portfolio)
C MacDonald DipEH, MCIWM	Executive Director (Operations Portfolio)

SEPA's Chief Officers are:

Name	Post
A Reid MA (Hons), MBA	Chief Officer Governance
F Martin MA CIPD	Chief Officer Resources
S McGregor CIMA	Chief Officer Finance

The Chief Executive, Executive Directors and Chief Officers biographies can be found on our website at: <http://media.sepa.org.uk/biographies/>

System of internal control

As Chief Executive (SEPA's Accountable Officer), I have overall responsibility for maintaining sound systems of internal control, which support the achievement of the organisation's policies, aims and objectives. This responsibility was assigned to me by the Scottish Ministers.

These systems of internal control provide reasonable assurance regarding the reliability of financial information used by the business and safeguard its assets. There are inherent limitations in any system of internal control and accordingly even the most effective system can provide only reasonable, and not absolute, assurance against material misstatement or loss.

Our organisational structure has clear lines of delegated responsibility for both operational and financial management. There is a comprehensive budgeting and financial reporting system, in line with the Scottish Public Finance Manual (SPFM), which as a matter of routine, compares actual results to the budgets approved by the SEPA Board. Management accounts are prepared for each portfolio and SEPA as a whole, on a monthly basis. Significant variances from budget are thoroughly investigated. Financial forecasts are prepared on a regular basis throughout the year and cash flow forecasts are also prepared regularly, to ensure that we have sufficient cash to meet our operational needs.

We have a risk management system, that regularly assesses key risks and controls. The systems of internal control are designed to manage risk to a reasonable level, rather than to eliminate all risk of failure to achieve policies, aims and objectives. They can, therefore, only provide reasonable, and not absolute, assurance of effectiveness.

These systems of internal control are based on processes designed to identify and prioritise risks to the achievement of the organisation's policies, aims and objectives; to evaluate the likelihood of those risks being realised, and the impact, should they be realised; and to manage them efficiently, effectively and economically. The systems of internal control have been in place for the year to 31 March 2016, and are up to the date of approval of the Annual Report and Accounts, and in accordance with SPFM guidance.

The risk and control framework

All bodies subject to the requirements of the Scottish Public Finance Manual (SPFM) must operate in accordance with relevant guidance issued by the Scottish Ministers. At SEPA, the following processes have been established:

- The organisation's approach to risk and a three year implementation plan 2014-2017 is approved by our Agency Board.
- The Agency Management Team considers corporate risk at its meetings at least twice a year.
- A Risk Management Group is responsible for the efficient and effective management of risk, including assurance that we comply with all relevant legislation and the responsibilities of corporate governance. The group meets several times a year and reports twice a year to the Agency Management Team and the Audit Committee, and annually to the Board.
- An internal corporate risk register is managed and reviewed on a quarterly basis.
- Appropriate risk awareness training is provided to line managers and more general guidance is published for all SEPA staff.
- The risk management procedures also provide for risk registers to be held and managed in each of SEPA portfolios, programmes and projects. The operation of each of these registers is reviewed annually by the Risk Management Group.
- An annual workshop is run with Agency Management Team and Non-Executive Directors, to review risks and the arrangements for managing these risks.
- Regular reports against SEPA's key performance indicators are provided to the Agency Board as well as periodic reports from the Chair of SEPA's Audit Committee.

We set our standards of information security through SEPA's Strategic Security Forum. This forum has set procedures for SEPA, which when followed; ensure that we comply with the mandatory requirements of the Cabinet Office Security Policy Framework. Internal performance against these procedures is overseen by the Information Security Group.

A programme of internal audit is provided under contract by Scott-Moncrieff Chartered Accountants to standards defined in the government internal audit manual. Reports of all internal audits and an annual opinion on the adequacy and effectiveness of the system of internal control, together with recommendations for improvement are provided to management and SEPA's Audit Committee. The work of the internal auditors is informed by an analysis of the risk to which SEPA is exposed, and the annual internal audit plan is based on this analysis. The analysis of risk and the internal audit plans are approved by me, and following discussion with the internal auditors, are endorsed by the Board's Audit Committee.

Through our business management system, we aim to ensure that the work we carry out is to a high quality and meets customers' requirements. The steps in place to ensure this high quality of service include:

- staff training;
- individual staff competency framework;
- documented procedures;
- proficiency testing;
- line management supervision.

In addition, we have a programme of internal quality and environmental system audits to ensure effectiveness and continual improvement of our business processes.

To demonstrate that our business is well-managed and that quality is considered in all aspects of our systems and processes, we have adopted three quality and environmental management standards. Lloyd's Register Quality Assurance (LRQA) audits performance against the standards ISO 9001 (quality management system) and ISO 14001 (environmental management system). The United Kingdom Accreditation Service (UKAS) audits the performance of nominated activities in our laboratories against ISO 17025 (testing and calibration).

Review of effectiveness

As Accountable Officer, I have responsibility for reviewing the effectiveness of the systems of internal control. My review of the effectiveness of the systems of internal control is informed by the work of the internal auditors and the executive managers within the organisation. The executive managers have responsibility for the development and maintenance of the internal control framework. I also rely on the comments made by the external auditors in their management letter and other reports. I have been advised on the effectiveness of the systems of internal control by the Audit Committee. The committee has kept me informed of plans to address any weaknesses discovered in internal control systems.

There have been no critical risks highlighted by internal audit reports in 2015-2016.

Regularity of expenditure and fees and charges

We have complied with the cost allocation and charging requirements set out by Scottish Public Finance Manual, HM Treasury and the Office of Public Sector Information guidance on trading funds.

3.4 Remuneration and staff report

3.4.1 Unaudited

The Board, Chief Executive, Executive Directors and Chief Officer's remuneration packages are agreed within the parameters set by the Scottish Government's pay policy. The Scottish Government approves the daily fee to be paid to the Chair and members, as well as approving the Chief Executive remuneration package. Our Board determines the contractual performance pay of the Chief Executive and ratifies the Chief Executive's recommendations on pay for the Agency Management Team.

There were no major decisions taken on Directors remuneration in year. Performance pay was not paid in 2015-2016 in accordance with the Scottish Government pay policy.

Board members contribute at least two days per month in support of SEPA's activities. The Chair devotes, at a minimum, 12 days per month in support of SEPA's activities and the Deputy Chair devotes three days per month.

3.4.2 Audited

The information provided below has been audited.

Chair, Board Members, Chief Executive, Executive Directors and Chief Officers

Year to 31 March 2016	Salary band	Value of pensions benefit ¹⁴	Value of benefits in kind ¹⁵
	£'000	£'000	£
Chair			
D Sigsworth - resigned 31 December 2015	30-35	-	228
B Downes - appointed 1 January 2016	10-15	-	166
Chief Executive			
J Curran - resigned 12 April 2015	5-10	(14)	-
T A'Hearn - appointed 13 April 2015	105-110	29	-
Executive Directors and Chief Officers			
C MacDonald	90-95	41	-
D Pirie	90-95	36	-
A Reid	70-75	33	-
F Martin	70-75	30	-
S McGregor	70-75	30	-
Board members			
K Nicholson	5-10	-	2,909
L Sawers	5-10	-	165
R Dixon	5-10	-	125
W McKelvey	5-10	-	360
M Francis	5-10	-	416
J Hyland	5-10	-	454
N Martin	5-10	-	196
M Hill	0-5	-	42
T McAuley - resigned 18 April 2016	5-10	-	72
F van Dijk – appointed 30 March 2016	-	-	-

¹⁴ The pension's benefit is calculated as follows: (real increase in pension x 20) + (real increase in any lump sum) - (contributions made by member).

¹⁵ The cost to SEPA of reimbursing Board members travel and subsistence expenses that HMRC classify as commuting from home to work. SEPA also makes an annual payment of the tax and NI to HMRC for the cost of providing catering for staff meetings, including Board meetings.

Year to 31 March 2015	Salary band	Value of pensions benefit ¹⁶	Value of benefits in kind ¹⁷
	£'000	£'000	£
Chair			
D Sigsworth	45-50	-	835
Chief Executive			
J Curran	110-115	6	-
Executive Directors and Chief Officers			
C MacDonald	90-95	3	-
D Pirie	90-95	10	-
A Reid	70-75	3	-
F Martin	70-75	9	-
S McGregor (appointed June 2014)	60-65	(3)	-
Board members			
B Downes	5-10	-	159
K Nicholson	5-10	-	2,812
L Sawers	5-10	-	81
R Dixon	5-10	-	168
W McKelvey	5-10	-	230
M Francis	5-10	-	327
J Hyland	5-10	-	624
N Martin	5-10	-	122
T McAuley	5-10	-	187

The Chief Executive, Executive Directors and Chief Officers are ordinary members of the Falkirk Pension Scheme, and we pay the employer's pension contribution, while the employee pays the employee's contribution, based on a sliding scale, commensurate with salary banding.

The performance related pay has not been paid in the current financial year.

All staff including the Chief executive, Executive Directors and Chief Officers are on incremental pay scales

¹⁶ The pension's benefit is calculated as follows: (real increase in pension x 20) + (real increase in any lump sum) - (contributions made by member).

¹⁷ The cost to SEPA of reimbursing Board members travel and subsistence expenses that HMRC classify as commuting from home to work. SEPA also makes an annual payment of the tax and NI to HMRC for the cost of providing catering for staff meetings, including Board meetings.

Pension entitlements of Chief Executive, Executive Directors and Chief Officers

For year ended 31 March 2016	Real increase/(decrease) In bands		Total accrued sum at 31 March 2016		Cash equivalent transfer value (CETV) at 31 March 2016	CETV at 31 March 2015 rebased	Real increase/ (reduction) in cash CETV excluding own contributions and inflation
			In bands				
	Pension	Lump sum	Pension	Lump sum			
	£'000	£'000	£'000	£'000			
Chief Executive							
J Curran ¹⁸	(2.5)-0	(2.5)-0	55-60	130-135	1,152	1,117	22
T A'Hearn ²	0-2.5	0	0-2.5	0	39	0	14
Executive Directors / Chief Officers							
C MacDonald	0-2.5	0-2.5	50-55	125-130	1,211	1,169	19
D Pirie	0-2.5	0-2.5	30-35	70-75	482	555	34
A Reid	0-2.5	0-2.5	40-45	95-100	910	842	56
F Martin	0-2.5	0-2.5	25-30	50-55	343	394	26
S McGregor	0-2.5	0-2.5	25-30	50-55	419	533	32

For year ended 31 March 2015	Real increase/(decrease)		Total accrued sum at at 31 March 2015		CETV at 31 March 2015	CETV at 31 March 2014	Real increase/ (reduction) in CETV
	In bands		In bands				
	Pension	Lump sum	Pension	Lump sum			
	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Chief Executive							
J Curran ¹⁹	0-2.5	(0-2.5)	50-55	130-135	1,117	1,041	36
Executive Directors / Chief Officers							
C MacDonald	0-2.5	(0-2.5)	45-50	120-125	1,169	1,094	37
D Pirie	0-2.5	(0-2.5)	30-35	65-70	555	511	20
A Reid	0-2.5	(0-2.5)	35-40	90-95	842	787	27
F Martin	0-2.5	(0-2.5)	20-25	50-55	394	362	15
S McGregor ²⁰	0-2.5	(0-2.5)	25-30	60-65	533	501	13

¹⁸ Resigned on 12 April 2015 - the information shown for this member is at their date of leaving.

¹⁹ Appointed Chief Executive on 13 April 2015 and joined the fund on 1 June 2015.

²⁰ Appointed in June 2014. Pre 2009 service has been updated since last year based on actual data provided by the fund

Head count	Male	Female	Total as at 31 March 2016	Male	Female	Total as at 31 March 2015
Board	7	5	12	7	4	11
Agency Management Team	5	1	6	5	1	6
Total²¹	11	6	17	11	5	16

Headcount by grade

Band	Pay Range	Number of staff	Number of staff
		31 March 2016	31 March 2015
Directors and Chief Officers	Greater than £69,077	6	6
A	59,914-69,077	20	20
B	48,397-55,800	39	41
C	40,995-47,264	161	167
D	32,340-37,825	367	376
E	26,760-30,841	405	422
Trainee	23,758-24,330	2	5
F	21,238-23,759	163	162
G	17,263-19,367	81	93
H	15,394-16,448	7	4
Total Headcount		1,251	1,296

	31 March 2016	31 March 2015
Average FTE supplied by agency staff in years	10	15
Analysis by contract type of SEPA employees		
Permanent contract	1,169	1,194
Fixed-term employees	82	102
SEPA headcount at 31st March	1,251	1,296

Average number of persons employed	Permanently employed staff	Others	Year to 31 March 2016	Year to 31 March 2015
Operations	554	39	593	606
Science and Strategy	479	34	513	526
Corporate Services*	94	7	101	98
Total	1,127	80	1,207	1,230

* Corporate Services includes Resources (Estates, Procurement, HR, Organisational Development, Health & Safety). Governance portfolio includes Secretariat, Communications, Resilience, Corporate Legal and Finance portfolios. Science and Strategy portfolio includes IT Services and Project Management Office. Operations portfolio now includes all office support.

²¹ The male total is reduced by 1 to remove the Chief Executive who is included twice as he is a member of both the Board and Agency Management Team.

	31 March 2016	31 March 2015
Band of highest paid Director	£100,000 - £110,000	£110,000 - £115,000
The average salary cost per employee was	£34,729	£33,462
Ratio of average cost per employee to highest paid member of staff	3:13	3:45

SEPA sought applications for voluntary redundancy in light of Scottish Government policy of no compulsory redundancies. The following table shows the payments made to individual staff and the total cost of staffs' exit package, including pension costs where the individual has been eligible for early retirement under pension scheme rules.

There were no compulsory redundancies in year 2015-2016 (2014-2015: none).

Year to 31 March 2016			Year to 31 March 2015	
	Total number of voluntary severance payments made to individuals by band	Total number of exit packages made to individuals by band	Total number of voluntary severance payments made to individuals by band	Total number of exit packages made to individuals by band
£'000	Number	Number	Number	Number
0-10	2	2		
10-25	12	10	6	5
25-50	14	13	3	2
50-100	10	12		
100-150		1		2
150-200				
Total	38	38	9	9
Total cost	£1,373,666	£1,678,340	£281,811	£494,514

The lost working time rate for 2015 - 2016 is 3.83% (2014-2015: 3.75%). The calculation is based on actual FTE and takes into account all working time and sickness absence for employees who left during the financial year. It also accounts for working time for employees who joined part way through the year. Using this methodology the lost working time rate for 2014-2015 was 3.75%, instead of the 2.94% reported last year.

We had a total head count of 1,251 staff at 31 March 2016, which represented 1,185 FTE for the year. The headcount was split 679 (54.3%) female staff and 572 (45.7%) male staff. Of 65 management posts, 23 (35%) were occupied by women, of which one was a member of the Agency Management Team, and 348 (27.8%) of our employees are over 50 years old. We have 27 (2.2%) disabled employees and 23 (1.8%) from Black, Asian, Mixed or other Ethnic Minority.

Approved by the Board on 26 July 2016 and signed on behalf of the Board.



9 August 2016

Terry A'Hearn
Chief Executive and Accountable Officer

Date of signature:

3.5 Parliamentary accountability and audit report.

Under the Public Finance and Accountability (Scotland) Act 2000, our independent auditors are appointed by the Auditor General. PricewaterhouseCoopers LLP were appointed as our auditors for the financial year 2015-2016.

The independent auditors were remunerated to the sum of £52,920 in respect of statutory audit services for the financial year 2015-2016. The fees payable to the external auditors are shown in note 6 of the 2015-2016 Annual Report and Accounts.

All relevant audit information has been made available to our auditors and the Accountable Officer has taken steps to ensure that the auditors are aware of any relevant audit information.

3.6 Independent auditors' report to the members of the Scottish Environment Protection Agency, the Auditor General for Scotland and the Scottish Parliament

We have audited the financial statements of Scottish Environment Protection Agency for the year ended 31 March 2016 under the Environmental Act 1995. The financial statements comprise the Statement of Comprehensive Net Expenditure, the Statement of Financial Position, the Statement of Cash Flows and the Statement of Changes in Taxpayers' Equity and the related notes. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union, and as interpreted and adapted by the 2015/16 Government Financial Reporting Manual (the 2015-2016 FReM).

This report is made solely to the parties to whom it is addressed in accordance with the Public Finance and Accountability (Scotland) Act 2000 and for no other purpose. In accordance with paragraph 125 of the Code of Audit Practice approved by the Auditor General for Scotland, we do not undertake to have responsibilities to members or officers, in their individual capacities, or to third parties.

Respective responsibilities of Accountable Officer and auditor

As explained more fully in the Statement of the Accountable Officer's Responsibilities, the Accountable Officer is responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and is also responsible for ensuring the regularity of expenditure and income. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland) as required by the Code of Audit Practice approved by the Auditor General for Scotland. Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors. We are also responsible for giving an opinion on the regularity of expenditure and income in accordance with the Public Finance and Accountability (Scotland) Act 2000.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the body's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the Accountable Officer; and the overall presentation of the financial statements. It also involves obtaining evidence about the regularity of expenditure and income. In addition, we read all the financial and non-financial information in the Annual Report and Accounts to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements, irregularities, or inconsistencies we consider the implications for our report.

Opinion on financial statements

In our opinion the financial statements:

- give a true and fair view in accordance with the Environmental Act 1995 and directions made thereunder by the Scottish Ministers of the state of the body's affairs as at 31 March 2016 and of its net expenditure for the year then ended;

- have been properly prepared in accordance with IFRSs as adopted by the European Union, as interpreted and adapted by the 2015/16 FReM; and
- have been prepared in accordance with the requirements of the Environmental Act 1995 and directions made thereunder by the Scottish Ministers.

Opinion on regularity

In our opinion, in all material respects, the expenditure and income in the financial statements were incurred or applied in accordance with any applicable enactments and guidance issued by the Scottish Ministers.

Opinion on other prescribed matters

In our opinion:

- the part of the Remuneration and Staff Report to be audited has been properly prepared in accordance with the Environmental Act 1995 and directions made thereunder by the Scottish Ministers; and
- the information given in the Directors Report and the Performance Report for the financial year for which the financial statements are prepared is consistent with the financial statements.

Matters on which we are required to report by exception

We are required to report to you if, in our opinion:

- adequate accounting records have not been kept; or
- the financial statements and the part of the Remuneration and Staff Report to be audited are not in agreement with the accounting records; or
- we have not received all the information and explanations we require for our audit; or
- the Governance Statement does not comply with guidance from the Scottish Ministers.

We have nothing to report in respect of these matters.



9 August 2016

Martin Pitt
Senior Statutory Auditor
 (for and on behalf of PricewaterhouseCoopers LLP)
 141 Bothwell Street, Glasgow G2 7EQ

Date of signature

4. Annual accounts

4.1 Statement of comprehensive net expenditure year to 31 March 2016

		Year to 31 March 2016 £'000	Year to 31 March 2015 £'000
	Note		
Income			
Income from charging schemes	3,23	37,391	36,340
Other income	4	5,728	5,729
Total operating income		43,119	42,069
Expenditure			
Staff costs	5	(59,357)	(56,426)
Depreciation, amortisation and impairment of non-current assets	10	(3,173)	(3,132)
Other operating charges	6	(22,331)	(23,059)
Total operating expenditure		(84,861)	(82,617)
Net operating expenditure		(41,742)	(40,548)
Finance income	8	3	3
Finance expenses	7	(2,734)	(2,571)
Net expenditure for year		(44,473)	(43,116)
Other comprehensive expenditure			
Net (loss)/gain on revaluation of property, plant and equipment	10	(1,656)	(726)
Actuarial gain/(loss) on pension scheme	20	40,986	(16,964)
Comprehensive net expenditure for the year funded by GiA		(5,143)	(60,806)

The excess expenditure over income represents the cost of the Scottish Government funded activities; the cash to fund these activities has been being taken directly to the Comprehensive Net Expenditure reserve. The note numbers referred to above are incorporated within the notes to the accounts contained on pages 84-110.

4.2 Statement of financial position at 31 March 2016

	Notes	As at 31 March 2016 £'000	As at 31 March 2015 £'000
Non-current assets			
Property, plant and equipment	10	24,701	26,598
Intangible assets	10	2,719	3,534
		<u>27,420</u>	<u>30,132</u>
Current assets			
Assets for sale	11	560	900
Trade and other receivables	13	3,332	3,474
Cash and cash equivalents	12	1,384	1,573
		<u>5,276</u>	<u>5,947</u>
Total assets		<u>32,696</u>	<u>36,079</u>
Current liabilities			
Trade and other payables < 1 year	14	(6,093)	(4,887)
Provisions for liabilities and charges <1 year	17	(139)	(184)
Total current liabilities		<u>(6,232)</u>	<u>(5,071)</u>
Total assets less current liabilities		<u>26,464</u>	<u>31,008</u>
Non-current liabilities			
Other payables > 1 year	15	-	-
Provisions for liabilities and charges >1 year	17	(1,780)	(2,159)
Employee retirement benefits	19-21	(46,486)	(80,957)
Total non-current liabilities		<u>(48,266)</u>	<u>(83,116)</u>
Total assets less total liabilities		<u><u>(21,802)</u></u>	<u><u>(52,108)</u></u>
Tax payers equity			
Comprehensive net expenditure reserve		(24,240)	(54,475)
Revaluation reserve		2,438	2,367
Total tax payers equity		<u><u>(21,802)</u></u>	<u><u>(52,108)</u></u>

The note numbers referred to above are incorporated within the notes to the accounts contained on pages 84-110.

There are no events which have occurred since the statement of financial position at 31 March 2016 was prepared, which require additional disclosure.

These annual accounts were approved by the Board on 26 July 2016.



Terry A'Hearn
Chief Executive and Accountable Officer

9 August 2016

Date of signature

4.3 Statement of cash flows year to 31 March 2016

		Year to 31 March 2016 £'000	Year to 31 March 2015 £'000
	Notes		
Net operating cost		(41,742)	(40,548)
Adjustments for non-cash transactions			
Depreciation, amortisation and impairments	10	3,173	3,132
Pension scheme adjustment	5,21	3,781	3,136
Prior period adjustment	14	-	(272)
Movements in working capital			
Decrease/(Increase) in trade and other receivables	13	142	(376)
(Decrease)/Increase in trade and other payables less than 1 year old	14	1,206	(124)
Decrease in trade and other payables more than 1 year old	15	-	(19)
Increase in provisions	17	(424)	(210)
Net cash outflow from operating activities		(33,864)	(35,281)
Cash flows from investing activities			
Purchase of non-current assets	10	(1,706)	(2,494)
Proceeds from disposal of non-current assets		-	-
Net cash outflow from investment		(1,706)	(2,494)
Cash flows from financing activities			
Bank interest received	8	3	3
GiA funding received in year	2	35,378	37,969
Net cash inflow from financing		35,381	37,972
Net increase in cash and cash equivalents		(189)	197
Cash and cash equivalents at start of year	12	1,573	1,376
Receipts due to the consolidated fund	24	182	116
Payments made to the consolidated fund	24	(182)	(116)
Cash and cash equivalents at end of year	12	1,384	1,573
Increase in cash for the year		(189)	197

The note numbers referred to above are incorporated within the notes to the accounts contained on pages 84-110.

There are no events which have occurred since the statement of financial position at 31 March 2016 was prepared, that require additional disclosure.

These annual accounts were approved by the Board on 26 July 2016.

4.4 Statement of changes in tax payer's equity for the year to 31 March 2016

	Notes	Comprehensive net expenditure reserve £'000	Revaluation reserve £'000	Total year to 31 March 2016 £'000
Balance at 1 April 2015		(54,475)	2,367	(52,108)
Grant from sponsoring department	2	35,378	-	35,378
Net expenditure for the year		(44,473)	-	(44,473)
Actuarial gain recognised in the statement of changes in tax payers equity	20	40,986	-	40,986
Revaluation of non-current assets	10	(1,656)	71	(1,585)
As at 31 March 2016		(24,240)	2,438	(21,802)

Comprehensive net expenditure reserve consists of:

Pensions deficit	20	(46,486)
Surplus arising from operating activities		22,246
Balance as at 31 March 2016		(24,240)

Statement of changes in tax payer's equity for the year to 31 March 2015

	Notes	Comprehensive net expenditure reserve £'000	Revaluation reserve £'000	Total year to 31 March 2015 £'000
Balance at 1 April 2014		(31,366)	2,354	(29,012)
Prior year adjustment	14	(272)	-	(272)
Restated balance at 1 April 2014		(31,638)	2,354	(29,284)
Grant from sponsoring department	2	37,969	-	37,969
Net expenditure for the year		(43,116)	-	(43,116)
Actuarial loss recognised in the statement of changes in tax payers equity	20	(16,964)	-	(16,964)
Revaluation of non-current assets	10	(726)	13	(713)
As at 31 March 2015		(54,475)	2,367	(52,108)

Comprehensive net expenditure reserve consists of:

Pensions deficit	20	(80,957)
Surplus arising from operating activities		26,482
Balance as at 31 March 2015		(54,475)

4.5 Notes to the accounts

1. Accounting policies

The accounts are prepared in accordance with the Accounts Direction issued by Scottish Ministers. This Accounts Direction requires compliance with HM Treasury's Financial Reporting Manual (FReM). The annual accounts have been prepared in accordance with International Financial Reporting Standards (IFRS) and interpretations issued by the International Financial Reporting Standards Interpretations Committee (IFRSIC). Where FReM permits a choice of accounting policy, the accounting policy that is judged to be most appropriate for SEPA, for the purpose of giving a true and fair view of its financial position, is described below. The policy has been applied consistently in dealing with items that are considered material to the accounts.

Accounting convention

The accounts are prepared under the historical cost convention, modified to account for the revaluation of property, plant and equipment to fair value as determined by the relevant accounting standard.

Accounting period

The accounting period commenced on 1 April 2015 and ended on 31 March 2016.

Going concern

The accounts have been prepared incorporating the requirements of international accounting standards and include an actuarial valuation of the pension scheme liability as explained in notes 19, 20 and 21 to the accounts. These reflect the inclusion of liabilities falling due in future years in respect of pension liabilities arising from the application of IAS 19 to SEPA. Hymans Robertson, the actuary to the pension scheme, has calculated the liability as at 31 March 2016. The actuary conducts a triennial review of the funding basis of the pension scheme and in the intervening years rolls forward the scheme's assets/liabilities in a desk top review. The last formal valuation of the fund was conducted as at 31 March 2014 and the next formal valuation is due on the scheme as at 31 March 2017. In preparing the projected pension expense for the year to 31 March 2016, the actuary has assumed employees continue to earn new benefits in line with the regulations as they currently stand and that the pensionable payroll remains stable with new entrants replacing leavers. The other main assumptions are set out in note 20.

SEPA's liabilities falling due in future years are in part met from income derived from charging schemes, and charging scheme prices have been increased to meet the expected costs attributable to them in 2015 - 2016, including pension costs. The Board has no reason to expect this process to change in the future. To the extent that the pension deficit is not met from SEPA's other sources of income, it may only be met by future grants or GiA from SEPA's sponsoring team, the Scottish Government Directorate for Environment and Forestry. This is because, under the normal conventions applying to parliamentary control over income and expenditure, such grants may not be paid in advance of need. The Board of SEPA has no reason to believe that future support will not be forthcoming. Given the above it has accordingly been considered appropriate to adopt a going concern basis for the preparation of these annual accounts.

Non-current assets

Property, plant and equipment

Valuation of these assets is recognised in the accounts as follows:

- Title of operational and non-operational land and properties are included in SEPA's accounts on the basis of the actual ownership and management of the assets concerned.
- Operational land and buildings fair value is assessed on the basis that the occupation for existing use will continue for the foreseeable future, unless otherwise stated. For non-specialised properties where there is direct market evidence, the fair value is assumed to be equal to open market value for existing use.
- For specialised properties, where there is no market evidence in respect of existing use, the value is assessed by using a depreciated replacement cost. There was a full exercise conducted at 31 March 2013 by a chartered surveyor working directly for SEPA to calculate what the replacement costs would be based on SEPA's recent constructions. These costs have been indexed by the construction costs indices issued by the Office of National Statistics to reflect price movements in 2015 - 2016.
- Surplus land and buildings are stated at open market value, in accordance with International Accounting Standard 16.
- Depreciated historic cost has been used as a proxy for the current value of equipment, fixtures and fittings, motor vehicles, plant and machinery, computer equipment and software. All of these assets in this category have:
 - low values and short useful economic lives which realistically reflect the life of the asset;
 - depreciation or amortisation charge which provides a realistic reflection of consumption.
- Small boats have been valued at historic cost, as Executive Directors and Chief Officers believe this is a proxy for fair value. These assets have a medium term economic life and the depreciation charge provides a realistic reflection of consumption. Periodically a professional valuation is obtained for the one larger vessel (Sir John Murray) owned by SEPA, to ensure that the historic cost is not materially different from market value.
- Depreciated historic cost is used as a proxy for fair value of plant and equipment that has a medium term economic life and where depreciation charge provides a realistic reflection of consumption.
- Expenditure on improvements, repairs and renewals of non-current assets is charged to the Statement of Comprehensive
- Net Expenditure in the year the expenditure is incurred, unless it is considered to have replaced a part of an asset. If it has replaced part of an asset, it will be capitalised and the cost and cumulative depreciation or amortisation of the asset it has replaced, will be removed from non-current assets.

Depreciation and amortisation

Depreciation or amortisation is provided on all non-current assets, other than freehold land. Depreciation or amortisation is calculated on a straight line basis over the useful lives of the asset as detailed in the table below. Asset lives were reviewed during the year ensuring that they continue to represent a reasonable estimate of useful economic life.

Depreciation and amortisation is charged to the Statement of Comprehensive Net Expenditure on the carrying value of the non-current assets. An element of the depreciation and amortisation arising from the increase in the valuation and in excess of the depreciation or amortisation that would be charged on the historic cost value of the asset is taken to the Revaluation Reserve.

Asset category	Asset lives (Years)
Buildings	20 to 60
Leasehold buildings	Over the remaining period of the lease
Plant and machinery	3 to 40
Fixtures, fittings, tools and equipment	5 to 15
Vessels	30
Computer hardware	5 to 15
Motor vehicles	4 to 10
Software developed in house	3 to 15
Purchased software	3 to 15

Assets in course of completion

Assets in course of completion are valued at cost. On completion they are transferred from the project account into the appropriate asset category. No depreciation or amortisation is charged until the asset is operational. The capitalisation threshold for assets is £6,000 including VAT. The actual salary costs including national insurance and superannuation of SEPA staff who are involved in the creation of non-current assets are capitalised against the relevant assets.

Intangible assets

Purchased software

Purchased software is valued at historical cost. These are licences to use software purchased from third parties with a life of more than one year and a cost of more than £6,000, including VAT. These licences are written off over the period they are in operational use.

In-house developed software

In-house developed software is the cost incurred for developing software with a life of more than one year and a cost of more than £6,000, including VAT. The actual salary costs, including national insurance and superannuation of SEPA staff who are involved in the creation of non-current assets, are capitalised against the relevant assets.

These costs are written off over the period the software is in operational use.

Impairment

The carrying value of SEPA's assets is reviewed at each statement of financial position date to determine whether there is any indication of impairment. An impairment loss is recognised in the Statement of Comprehensive Net Expenditure whenever:

- the carrying amount of assets exceeds the recoverable amount;
- the residual value has fallen below that originally estimated;
- the economic life of the asset is lower than originally estimated.

Provisions for liabilities and charges

Provisions for liabilities and charges are based on realistic and prudent estimates of the expenditure required to settle future legal or constructive obligations, arising from past events that exist at the statement of financial position date.

Provisions are usually charged to the Statement of Comprehensive Net Expenditure. If they relate to a non-current asset they will be capitalised as part of the cost of an asset. In such cases the capitalised provision will be depreciated as a charge to the Statement of Comprehensive Net Expenditure over the remaining estimated useful economic life of the underlying asset.

The provisions at the year-end were for: unfunded pension liabilities in respect of pension commitments inherited from SEPA's predecessor bodies and the past Chair, and for an expected staff claim.

Reserves

The Comprehensive Net Expenditure Reserve represents the excess of expenditure over income on GiA funded activities. The Revaluation Reserve reflects the increase in value of land, buildings, and items of plant included in the gauging stations, over their historical costs.

Corporation tax

The income from GiA and charging schemes is not chargeable to tax. It has been agreed with HM Revenue and Customs that profit generated from commercial contract work undertaken by SEPA will be chargeable to corporation tax.

Value added tax

Irrecoverable VAT is charged to the Statement of Comprehensive Net Expenditure or the cost of assets in the period in which it is incurred.

Leases

SEPA has a small number of operating lease rentals, the costs are charged to expenditure in equal annual amounts over the lease term. SEPA does not enjoy the risks or rewards associated with ownership of the items leased.

Government Grant-in-Aid (GiA)

GiA received to cover general operating activities and replacement of small capital items is shown as financing income and credited directly to the Comprehensive Net Expenditure Reserve.

Income

Income represents the total value excluding VAT of income received from SEPA specific and UK wide charging schemes pertaining to application costs and annual subsistence charges relating to continuance of licences. Other income relates to the recovery of costs of SEPA activities undertaken on behalf of other public sector bodies in the year.

SEPA recognises income when either:

- a) cash is received with an application or variation of a licence and GiA; or
- b) invoices are raised for subsistence fees or other charges.

IAS 1 requires line items for income to be grouped into:

- a) will not be reclassified subsequently to profit or loss; and
- b) will be reclassified subsequently to profit or loss when specific conditions are met.

All of SEPA's income falls under b) above.

Expenditure

Expenditure incurred on day to day operational activities is accounted for or charged into the Statement of Comprehensive Net Expenditure in the year that the work has been done. Staff costs are accounted for in the year that salaries are earned together with the employers costs. Other

expenditure is charged or accrued into the year the services or goods were used. As part of the year end accounts process, a detailed accrual exercise is conducted to ensure expenditure is matched with income appropriately. Expenditure that relates to future accounting periods of more than £5,000 is prepaid and will be matched to income earned in future periods. All expenditure that related to services or goods received by 31 March 2016, which were invoiced in April, have been accrued. Items with a cost greater than £5,000 discovered in May have been accrued.

Pension costs

SEPA participates in the Local Government Superannuation Scheme which is a defined benefit scheme. The expected cost of providing staff pensions is recognised on a systematic basis over the expected average remaining lives of members of the pension fund in accordance with International Accounting Standard 19 and recognises retirement benefits as the benefits are earned and not when they are due to be paid. The actuary reviews the scheme on a triennial basis and SEPA has always implemented the contributions recommended (notes 19, 20 and 21). The contribution charges are recognised in the accounting years in which they arise.

SEPA provides in full for the cost of meeting pensions up to normal retirement age in respect of staff taking early retirement programmes and voluntary severances in the current and previous years. Most pensions payable after normal retirement age are met by the pension scheme, although there are some pension liabilities inherited from predecessor bodies, that are met directly by SEPA - these are reflected in the unfunded pension liabilities, refer to note 17.

Research and development expenditure

Research and development expenditure is written off to the Statement of Comprehensive Net Expenditure as it is incurred. This pertains to specific commissioning of one off research projects.

Financial instruments

SEPA's financial instruments comprise: trade and other receivables, trade and other payables, cash and liquid resources. Trade receivables are initially recognised at fair value and subsequently held at amortised cost. Robust annual reviews are undertaken of all outstanding debtors to determine the likelihood of payment and subsequent write off to the Statement of Comprehensive Net Expenditure. Debtors under review are written off to the bad debt provision until resolved. Subsequent recoveries of amounts previously written off are taken to the Statement of Comprehensive Net Expenditure. Trade payables are held at cost, which is considered to represent fair value. Any cash is held in accounts with highly rated banks. SEPA is substantially funded by income from Scottish Government, therefore, it is not subject to significant liquidity or credit risk exposure.

Foreign exchange

Transactions that are denominated in a foreign currency are translated into Sterling using the exchange rate applied by the bank when making payment. This policy results in no exchange differences being included in the accounts.

Notional costs

FReM has removed the need to calculate and account for cost of capital, in the form of interest on capital, from 1 April 2010. Notional costs of capital are included in the costs recovered under the charging schemes, to reflect the cost of using government funded assets to deliver services (note 24). The charge was calculated at 3.5% of the average carrying amount of all assets, including assets in course of construction less trading liabilities, apportioned between charging scheme and non-charging scheme activities.

Review of accounting policies and estimation techniques

These annual accounts have been prepared under International Financial Reporting Standards (IFRS). SEPA has reviewed all its accounting policies to ensure their continued relevance.

There are a number of areas where judgement has to be made in how the accounting policies outlined above are applied. Specifically these relate to:

- valuation of specialised buildings (note 10);
- the fair values of properties (note 10);
- evidence used to assess impairment in trade receivables (note 13).

SEPA has followed actuarial advice and changed a number of the assumptions used to produce the pension's liability valuation at 31 March 2016. The change that had the most impact in year was the assumption made on the discount rate to be applied. Notes 19 to 21 provide the detail of the assumptions used.

Sensitivity analysis

By the nature of assumptions or judgements, any change will have an impact on the value of the asset or liability reported in the annual accounts. The most significant financial impact arises from changes to assumptions used to calculate the pension's deficit. The sensitivities regarding the principal assumptions used to measure the scheme liabilities are set out below:

Change in assumption at 31 March 2016	Approximate % increase in employers liability	Approximate monetary amount £'000
0.5% decrease in real discount rate	13	35,520
1 year increase in member life expectancy	3	8,157
0.5% increase in salary increase rate	5	14,274
0.5% increase in pension increase rate	8	20,715

2. Grant-in-aid (GiA)

	Year to 31 March 2016 £'000	Year to 31 March 2015 £'000
Cash GiA received to meet expenditure	35,378	37,969

The amount of GiA provided to SEPA is initially agreed by Ministers, as part of the Scottish budget process. This figure is then subject to adjustments as agreed with the sponsor division. Government Financial Reporting Manual instructs that GiA goes directly to the Comprehensive Net Expenditure Reserve in the statement of financial position, as financing.

3. Income from charging schemes

	Year to 31 March 2016 £'000	Year to 31 March 2015 £'000
Pollution, Prevention and Control	5,701	5,668
Waste Management Licensing	5,400	5,039
Special Waste	1,733	1,686
Radioactive Substances Act	2,514	2,350
Control of Major Accident Hazards Regulations	103	125
Emissions Trading	285	291
Water Environment and Water Services (Water Framework Directive)	21,477	20,997
Carbon Reduction Commitment	169	173
Aviation European Trading Scheme	9	11
	37,391	36,340

The financial objective for the charging schemes is full cost recovery, based on all costs including the cost of capital and other notional costs (see note 24). SEPA achieved a 99% cost recovery across all schemes in 2016 (98% in 2014-2015).

4. Other income

	Year to 31 March 2016 £'000	Year to 31 March 2015 £'000
Income from contracts	2	23
Water Environment Fund grants	1,880	2,743
Payments from other agencies	3,334	2,042
EU LIFE income	486	680
Sundry income	26	241
	5,728	5,729

5. Information regarding employees and Board members

Staff costs during the year	Permanently employed staff	Others	Year to 31 March 2016	Year to 31 March 2015
	£'000	£'000	£'000	£'000
Wages and salaries	40,796	2,861	43,657	41,930
Social security costs	3,022	212	3,234	3,201
Pension costs	7,449	523	7,972	7,153
Subtotal of payroll costs	51,267	3,596	54,863	52,284
Other staff related costs (principally recruitment fees, staff subsistence, training costs and hiring agency and temporary staff)			998	1,116
IAS19 pension charge (note 21)			3,781	3,136
Unfunded pensions charge (note 17)			(285)	(110)
			59,357	56,426

The total cost of the voluntary severance scheme included in the figures above was £1,678,340 (2014-2015: £494,514).

Average full time equivalent number of persons employed by service provision

	Permanently employed staff	Others	Year to 31 March 2016	Year to 31 March 2015
	FTE	FTE	FTE	FTE
Operations	554	39	593	606
Science and Strategy	479	34	513	525
Corporate Services ²²	94	7	101	99
	1127	80	1207	1230

The above numbers derived from SEPA payroll are averaged across the financial year and do not include external contract staff.

There were 11.63 FTE (2014-2015: 21.08 FTE) working on EU Life projects, 7.11 FTE in Science and Strategy, 2.84 FTE in Operations and 1.18 FTE in Corporate Services.

²² Corporate Services includes: Resources (Estates, Procurement, HR, Organisational Development, and Health & Safety). Governance portfolio includes: Secretariat, Communications, Resilience, Corporate Legal and Finance portfolio. Science and Strategy portfolio includes: IT Services and Project Management Office. Operations portfolio now includes all office support.

6. Other operating charges

	Year to 31 March 2016 £'000	Year to 31 March 2015 £'000
Supplies and services	14,593	15,300
Property costs	4,063	3,645
Transport costs	1,225	1,607
Research and development costs	301	308
Board expenses	17	20
Property and vehicle leases	2,073	2,126
External Auditor's remuneration – audit services	59	53
	22,331	23,059

7. Interest payable

	Year to 31 March 2016 £'000	Year to 31 March 2015 £'000
International Accounting Standards (IAS) 19 net return on pension scheme assets and liabilities	(2,734)	(2,571)
	(2,734)	(2,571)

The negative net return position on pension assets at 31 March 2016 is as a result of the actual return on pension scheme assets and liabilities of £7,253,000 being significantly less than the projected return on employee assets and liabilities of £9,987,000 (note 21 refers).

8. Interest receivable and similar income

	Year to 31 March 2016 £'000	Year to 31 March 2015 £'000
Bank interest received	3	3
	3	3

9. Taxation

SEPA is not liable to corporation tax for 2015 - 2016.

10. Non-current assets

Tangible assets											Intangible assets			
Year to 31 March 2016	Land	Buildings	Lease-hold buildings	Plant and machinery	Vessels	Computer equipment	Motor vehicles	Fixtures fittings tools and equipment	Assets in course of completion	Total tangible assets	Software developed in-house	Purchased software	Total intangible assets	Total
Cost or valuation	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
1 April 2015	1,033	14,601	6,802	12,486	2,020	4,684	315	2,179	49	44,169	4,324	6,852	11,176	55,345
Transferred for sale	(90)	(50)	-	-	-	-	-	(243)	-	(383)	-	-	-	(383)
Additions at cost	-	41	343	858	141	174	-	-	-	1,557	101	48	149	1,706
Brought into operational use	-	-	-	49	-	-	-	-	(49)	-	-	-	-	-
Impairment	-	(44)	(414)	(422)	-	-	-	(43)	-	(923)	-	-	-	(923)
Disposals	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revaluations	247	(1,349)	-	(133)	-	-	-	(377)	-	(1,612)	-	-	-	(1,612)
At 31 March 2016	1,190	13,199	6,731	12,838	2,161	4,858	315	1,516	0	42,808	4,425	6,900	11,325	54,133
Depreciation														
1 April 2015		5,211	1,160	7,567	919	2,042	152	520	-	17,571	3,401	4,241	7,642	25,213
Charge for year	-	260	355	684	73	569	29	159	-	2,129	208	756	964	3,093
Transferred for sale	-	-	-	-	-	-	-	(182)	-	(182)	-	-	-	(182)
Impairments	-	(23)	(381)	(396)	-	-	-	(43)	-	(843)	-	-	-	(843)
Disposals	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revaluations	-	(325)	-	(98)	-	-	-	(145)	-	(568)	-	-	-	(568)
At 31 March 2016	-	5,123	1,134	7,757	992	2,611	181	309	-	18,107	3,609	4,997	8,606	26,713
Net book value at 31 March 2016	1,190	8,076	5,597	5,081	1,169	2,247	134	1,207	0	24,701	816	1,903	2,719	27,420
Net book value at 31 March 2015	1,033	9,390	5,642	4,919	1,101	2,643	163	1,659	49	26,598	923	2,611	3,534	30,132

Tangible assets											Intangible assets			
Year to 31 March 2015	Land	Buildings	Lease-hold buildings	Plant and machinery	Vessels	Computer equipment	Motor vehicles	Fixtures fittings tools and equipment	Assets in course of completion	Total tangible assets	Software developed in-house	Purchased software	Total intangible assets	Total
Cost or valuation	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
At 1 April 2014	955	15,152	5,947	12,216	2,020	4,340	315	3,260	468	44,673	4,324	5,984	10,308	54,981
Recategorised in year	-	189	-	-	-	-	-	(216)	-	(27)	-	-	-	(27)
Restated - 1 April 2014	955	15,341	5,947	12,216	2,020	4,340	315	3,044	468	44,646	4,324	5,984	10,308	54,954
Additions at cost	-	-	-	-	-	-	-	-	2,494	2,494	-	-	-	2,494
Brought into operational use	-	177	855	669	-	344	-	-	(2,913)	(868)	-	868	868	-
Impairment	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disposals	-	(22)	-	(354)	-	-	-	(737)	-	(1,113)	-	-	-	(1,113)
Revaluations	78	(895)	-	(45)	-	-	-	(128)	-	(990)	-	-	-	(990)
At 31 March 2015	1,033	14,601	6,802	12,486	2,020	4,684	315	2,179	49	44,169	4,324	6,852	11,176	55,345
Depreciation														
At 1 April 2014	-	5,194	799	7,191	700	1,543	123	1,221	-	16,771	3,173	3,655	6,828	23,599
Recategorised	-	(36)	-	-	-	-	-	-	-	(36)	-	-	-	(36)
Restated – 1 April 14	-	5,158	799	7,191	700	1,543	123	1,221	-	16,735	3,173	3,655	6,828	23,563
Charge for year	-	284	361	746	82	499	29	180	-	2,181	228	586	814	2,995
Impairments	-	-	-	-	137	-	-	-	-	137	-	-	-	137
Disposals	-	(16)	-	(337)	-	-	-	(737)	-	(1,090)	-	-	-	(1,090)
Revaluations	-	(215)	-	(33)	-	-	-	(144)	-	(392)	-	-	-	(392)
At 31 March 2015	-	5,211	1,160	7,567	919	2,042	152	520	-	17,571	3,401	4,241	7,642	25,213
Net book value														
At 31 March 2015	1,033	9,390	5,642	4,919	1,101	2,642	163	1,659	49	26,598	923	2,611	3,534	30,132
At 31 March 2014	955	9,958	5,148	5,025	1,320	2,797	192	2,039	468	27,902	1,151	2,329	3,480	31,382

The charge in the Statement of Comprehensive Net Expenditure includes depreciation and amortisation charged for the year and the net book value of impairments (£923,000 less (£843,000) plus £3,093,000 equals £3,173,000).

Buildings category includes properties whose fair value is provided by Knight Frank and the building component of the gauging stations, whose fair value is the estimated replacement costs.

For buildings held in non-current assets that have an active market, SEPA had a desk top valuation of its estate completed by Knight Frank as at 31 March 2016. The resulting valuation showed a reduction in market values of £1,795,000 from the valuation at 31 March 2015. This has been reflected in this set of accounting statements

The specialised buildings assessment of replacement cost was conducted for the year 2012/13. The exercise was conducted by a chartered surveyor working directly for SEPA to calculate what the replacement costs would be for the gauging stations based on SEPA's recent constructions. These estimated replacement costs were indexed to reflect movements in costs for 2015 - 2016.

Depreciated historic cost has been used as a proxy for the current value of fixtures and fittings, boats, motor vehicles, plant and machinery, computer equipment and software. All of the assets in these categories have: (a) low values and short useful economic lives, which realistically reflect the life of the asset; and (b) a depreciation or amortisation charge, which provides a realistic reflection of consumption.

The Sir John Murray (the only large vessel) was valued by Century Marine at £940,000 as at 31 March 2016. The depreciated net book value is in line with the valuation.

Intangible non-current assets are all purchased software and in house developed software with a life of more than one year and a cost of more than £6,000 including VAT.

The £1,656,000 net loss on revaluation of property plant and equipment, shown below the net operating expenditure line in the Statement of Comprehensive Net Expenditure for the year, relates to the valuation movement in land and property held within non-current assets and assets held for sale in current assets.

The £1,656,000 consists of a reduction of £1,245,000 in valuation of non-current assets and the reduction in assets held for sale £480,000, less a release of the revaluation reserve £69,000.

11. Current assets for sale

	As at 31 March 2016 £'000	As at 31 March 2015 £'000
Current assets for sale	560	900
	560	900

As at 31 March 2016 two properties are held for sale, both are vacant and are actively being marketed. Knight Frank provided the market valuation for the properties. There was a reduction in its value of £480,000 and the bulk of this impairment has been written off to other comprehensive expenditure in year.

12. Cash and cash equivalents

	As at 31 March 2016 £'000	As at 31 March 2015 £'000
Balance at 1 April	1,573	1,376
Net change in cash and cash equivalent balances	(189)	197
Balance at 31 March	1,384	1,573

The following balancers at 31 March were held at:

Government banking services	599	1,161
Commercial banks and cash in hand	785	412
Balance at 31 March	1,384	1,573

13. Trade and other receivables

	As at 31 March 2016 £'000	As at 31 March 2015 £'000
Trade receivables	1,296	1,588
Less provisions for bad debts	(97)	(244)
Trade receivables net	1,199	1,344
Other trade receivables	11	12
Prepayments and accrued income	2,122	2,118
	3,332	3,474

At the year end the total bad debt provision is £96,607 (2014-2015: £244,310). Included within the trade receivables there is £0 (2015 - £677,792) owing from central government bodies, £5,140 (2014-2015: £56,733) owing from local authority bodies, £5,500 (2014-2015: £369) owing from NHS Bodies and £362,643 (2014-2015: £182,548) owing from other public bodies.

14. Trade and other payables: amounts falling due within one year

	As at 31 March 2016 £'000	As at 31 March 2015 £'000
Trade payables	126	56
Other taxes and social security	1,108	959
VAT	44	82
Accruals and deferred income	4,815	3,790
	6,093	4,887

Included within the trade and other payables there is £3,213 (2014-2015: £1,173) owing to local authority bodies, £1,107,743 (2014-2015: £958,934) owing to central government bodies, £0 (2014-2015: £1,678) owing to NHS bodies and £4,703 (2014-2015: £1,134) owing to other public bodies. There was a prior year adjustment in 2014-2015 from the recalculation of an accrual which resulted in a prior year adjustment of £272,000.

15. Trade and other payables: amounts falling due after one year

	As at 31 March 2016	As at 31 March 2015
	£'000	£'000
VAT	-	-
	-	-

16. Contingent liabilities

SEPA occupies a number of leased properties which have dilapidations clauses in the leases. SEPA maintains these properties in excellent order, but has a potential liability to reinstate the internal layout of the building to its original floor plan at inception of the lease. At 31 March 2016 notice has been given on one property. The cost of the dilapidation fee cannot be reliably estimated. The level of liability will be subject to future negotiation with the landlord.

17. Provision for liabilities and charges

Year to 31 March 2016	Unfunded pension liabilities	Other provisions	Total provision for liabilities and charges
	£'000	£'000	£'000
Balance at 1 April 2015	2,301	42	2,343
Actuarial valuation changes	(285)	-	(285)
Provisions made	-	-	-
Utilised	(139)	-	(139)
As at 31 March 2016	1,877	42	1,919

Year to 31 March 2016	Unfunded pension liabilities	Other provisions	Total provision for liabilities and charges
	£'000	£'000	£'000
Liabilities due > 1 year	1,738	42	1,780
Liabilities due < 1 year	139	-	139
As at 31 March 2016	1,877	42	1,919

The unfunded pension liabilities represent liabilities in respect of pension commitments inherited by SEPA from predecessor bodies and a former SEPA Chair. These liabilities are mainly payable to other authorities for costs of former employee pensions and include one direct payment to a pensioner. The provision for other claims represents an estimate of staff claims.

Year to 31 March 2015	Unfunded pension liabilities	Other provisions	Total provision for liabilities and charges
	£'000	£'000	£'000
Balance at 1 April 2014	2,553	-	2,553
Actuarial valuation changes	(110)	-	(110)
Provisions made	-	42	42
Utilised	(142)	-	(142)
As at 31 March 2015	2,301	42	2,343

Year to 31 March 2015	Unfunded pension liabilities	Other provisions	Total provision for liabilities and charges
	£'000	£'000	£'000
Liabilities due > 1 year	2,159	-	2,159
Liabilities due < 1 year	142	42	184
As at 31 March 2015	2,301	42	2,343

18. Financial commitments

There are no capital commitments at 31 March 2016 (2014-2015: £0). The table below provides information regarding expenditure committed to in future financial years. The analysis of land and buildings, lease and rental costs are subdivided to show the total costs related to the length of the lease left to run.

Total commitments under operating leases which expire as at 31 March 2016

	Land and Buildings		Other	
	2016	2015	2016	2015
	£'000	£'000	£'000	£'000
Payable within one year	1,839	1,673	77	77
Later than 1 year but less than 5 years	5,584	6,555	119	119
After 5 years	14,915	18,338	-	-
	22,338	26,566	196	196

All contractual land and building leases are 'full repairing' leases and the basis of all future lease payments is as deemed at the point of agreement. All vehicle lease payments are determined at the point of agreement. It is SEPA's responsibility to ensure that all vehicles are maintained in accordance with the contractual terms.

19. Pension costs

SEPA contributes to the Falkirk Council Pension Fund. This is a Local Government Pension Scheme (LGPS), which is a defined benefit scheme and is administered by Falkirk Council. This Scheme is a multi-employer scheme. Employee contributions, based on salary, are fixed by statute currently on a scale of 5.5% - 12%.

The latest formal valuation of the Fund for the purpose of setting employer's actual contributions was at 31 March 2014, with the next full formal valuation scheduled for 31 March 2017. The Scheme actuaries have undertaken a pension expense calculation for SEPA as at 31 March 2016, and these figures form the basis of the statement of financial position and funding disclosures made in these accounts.

The pension costs for the year represent the contributions paid by SEPA to the scheme of £7,972,000 (2014-2015: £7,190,000). There was nothing outstanding at 31 March 2016 in relation to the pension contribution (2014-2015: £816,170).

20. IAS 19 – Pension asset and liabilities

In accordance with International Accounting Standard No 19 'Employee Benefits' (IAS19), SEPA is required to account for the net pension liability of £46,486,000 (2014-2015: £80,957,000) for the financial year ended 31 March 2016, as valued by Hymans Robertson, the actuaries to the Falkirk Council Pension Fund.

In order to assess the value of the Fund's liabilities as at 31 March 2016, the actuary has used: the bid value of fund assets at the latest available date; the actual split of fund assets at the latest available date; the fund returns at the latest available date; the latest number of employees; the latest available information on deferred and active pensioners; and the other data rolled forward from the last formal valuation at 31 March 2014. The actuary has projected the results of the March 2014 valuation forward to 31 March 2016 using approximate methods. This exercise allows for changes to the financial assumptions, additional benefit accrual, and estimated cash flows over the year and the current membership information.

The actuary has:

- (a) Made allowance for the removal of the entitlement for new members to retire under the "Rule of 85" for new entrants from 1 December 2006.
- (b) Projected pension expense for the year to 31 March 2016 allowing for LGPS career averaged revalued earnings (CARE) benefit design.
- (c) Assumed members retiring who are now able to elect to take an additional tax-free lump sum in lieu of part of their pension. The actuaries have included an allowance for 50% of future retirees to take additional cash up to HM Revenue and Customs limits for pre April 2009 service and 75% of the maximum cash for the post April 2009 service.
- (d) Used post retirement mortality assumptions based on Hyman's Club Vita analysis. These are a bespoke set of VitaCurves that are specifically tailored to fit the membership profile of the fund and are based on data provided for the last formal valuation. Improvements have been assumed on long term rate in the rate of longevity at 1.25% per annum. Based on these assumptions the SEPA specific average future life expectations at age 65 are:

	Males	Females
Current Pensioners	23.4 years	24.3 years
Future Pensioners	25.1 years	26.5 years

- (e) Calculated future liabilities using Consumer Price Index (CPI) uplift applied to future pension payments.
- (f) Valued the assets in the whole Fund at bid value.

(g) The asset values below are at bid value as required under IAS 19. Where asset splits were not available at the exact start and end dates, the nearest split prior to these dates has been used by the actuaries.

Assets

Asset category	As at 31 March 2016				As at 31 March 2015			
	Quoted prices in active markets	Prices not quoted in active markets	Total		Quoted prices in active markets	Prices not quoted in active markets	Total	
	£'000	£'000	£'000	%	£'000	£'000	£'000	%
Equity securities:								
Consumer	23,677	-	23,677	10	21,039	-	21,039	10
Manufacturing	12,739	-	12,739	6	12,958	-	12,958	6
Energy and utilities	8,040	-	8,040	4	8,569	-	8,569	4
Financial institutions	14,568	-	14,568	6	15,882	-	15,882	7
Health and care	11,531	-	11,531	5	11,280	-	11,280	5
Information technology	13,651	-	13,651	6	8,774	-	8,774	4
Other	5	-	5	0	3,747	-	3,747	2
Debt securities								
Corporate bonds (investment grade)	-	3643	3,643	2	-	-	-	-
Corporate bonds (non-investment grade)	-	-	-	-	-	-	-	-
UK Government	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Private equity:								
All	-	16,398	16,398	7	-	12,590	12,590	6
Real estate:								
UK property	-	17,525	17,525	8	-	15,627	15,627	7
Overseas property	-	533	533	-	-	764	764	-
Investment funds and unit trusts:								
Equities	47,948	-	47,948	21	46,744	-	46,744	22
Bonds	-	15,535	15,535	7	19,302	-	19,302	9
Infrastructure	-	2,948	2,948	1	-	5,470	5,470	2
Other	26,016	-	26,016	12	25,416	-	25,416	12
Derivatives:								
Other	-	-	-	-	8	-	8	-
Cash and cash equivalents:								
All	10,650	-	10,650	5	9,224	-	9,224	4
Totals	168,825	56,582	225,407	100	182,943	34,451	217,394	100

- (h) Financial assumptions used in 2015-2016 to arrive at the discount rate were:
- A corporate bond yield curve was constructed by Hymans Robertson based on constituents of iBoxx AA corporate bond index.
 - The discount rate used recognises the weighted average duration (or term) of the benefit obligation
- (i) The employer is then categorised into a short, medium or long term – reflecting the weighted average of the duration of the benefit obligation. SEPA has been classified as long term.
- (j) The financial assumptions utilised by the actuary to calculate liabilities under IAS 19 were based on:

Year ended	31 March 2016 (% per annum)	31 March 2015 (% per annum)
Pension increases	2.2	2.5
Salary increases – to 31 March 2020 (2016)	1.6	2.5
Salary increases – after 31 March 2020 (2016)	CPI plus 0.5	CPI plus 0.5
Discount rate	3.6	3.3

	Number		Total salaries / pensions		Average age	Liability split	Liability split	Weighted average duration
	15 Jan 2015	31 Mar 2014	31 Dec 2014 £'000	31 Mar 2014 £'000	31 Mar 2014	31 Mar 2016 £'000	Percentage (%) at 31 March 2016	at previous formal valuation
Actives	1,270	1,266	39,866	39,135	48	164,528	60.5%	27.6
Deferred pensioners	573	559		1,765	47	37,663	13.9%	26.4
Pensioners	293	285		3,445	63	69,702	25.6%	13.1
Total						271,893	100%	23.1

- (k) As a result of these financial assumptions being applied, SEPA obligations or liabilities under the scheme have decreased by £26,457,000. This reduction has been augmented by cash inflows from contributions in year being greater than cash benefits paid by £4,848,000, and returns on assets £3,166,000. The overall decrease in the pension deficit in year is £34,471,000, taking the total deficit down to £46,486,000.
- (l) The most significant movements are caused by changes in the discount rate applied, that has increased by 0.3% compared to 2014-2015. Added to this, changes in pensions rate and salary increases used for the calculation results in a reduction in liability of £42,259,000.

Change in fair value of SEPA's pension plan assets, defined benefit obligations and net liability for the year ended 31 March

	Year ended 31 March 2016			Year ended 31 March 2015		
Pensions Deficit	Assets	Obligations	Net (liability)/asset	Assets	Obligations	Net (liability)/asset
	£'000	£'000	£'000	£'000	£'000	£'000
Fair value of employer assets	217,393	-	217,393	191,232	-	191,232
Present value of funded liabilities	-	(298,350)	(298,350)	-	(249,518)	(249,518)
Opening position as at 31 March	217,393	(298,350)	(80,957)	191,232	(249,518)	(58,286)
Service cost						
Current service cost ²³	-	(11,207)	(11,207)	-	(10,220)	(10,220)
Past service cost (including curtailments)	-	(492)	(492)	-	(11)	(11)
Total service cost	-	(11,699)	(11,699)	-	(10,231)	(10,231)
Net interest						
Interest income on plan assets	7,253	-	7,253	8,330	-	8,330
Interest cost on defined benefit obligation	-	(9,987)	(9,987)	-	(10,901)	(10,901)
Total net interest	7,253	(9,987)	(2,734)	8,330	(10,901)	(2,571)
Total defined benefit cost recognised in profit or (loss)	7,253	(21,686)	(14,433)	8,330	(21,132)	(12,802)
Cash flows						
Plan participants' contributions	2,639	(2,639)	-	2,650	(2,650)	-
Employer contributions	7,918	-	7,918	7,095	-	7,095
Benefits paid	(5,709)	5,709	-	(4,441)	4,441	-
Expected closing position	229,494	(316,966)	(87,472)	204,866	(268,859)	(63,993)
Re-measurements						
Change in demographic assumptions	-	-	-	-	(2,930)	(2,930)
Change in financial assumptions	-	42,259	42,259	-	(5,318)	(5,318)
Other experience	-	2814	2,814	-	(21,243)	(21,243)
Return on assets excluding amounts included in net interest	(4,087)	-	(4,087)	12,527	-	12,527
Total re-measurements recognised in other comprehensive income	(4,087)	45,073	40,986	12,527	(29,491)	(16,964)
Fair value of employer assets	225,407	-	225,407	217,393	-	217,393
Present value of funded liabilities	-	(271,893)	(271,893)	-	(298,350)	(298,350)
Closing position as at 31 March	225,407	(271,893)	(46,486)	217,393	(298,350)	(80,957)

²³ The current service cost includes an allowance for administration expenses of 0.2% of payroll.

21. IAS 19 – Details of entries in the statement of comprehensive net expenditure

IAS 19 requires SEPA to analyse and disclose its pension liabilities as at 31 March 2016. There is a decrease in forecast net liabilities as calculated by Hymans Robertson in their capacity as actuary to the Falkirk Council Pension Fund. This amount has been reflected in the annual accounts. IAS 19 also requires SEPA to analyse and disclose the amounts included within the Statement of Comprehensive Net Expenditure, these are detailed below.

Statement of comprehensive net expenditure	Year to 31 March 2016 £'000	Year to 31 March 2015 £'000
Charge to operating costs		
Current service cost	11,207	10,220
Past service cost	492	11
Total service cost	11,699	10,231
Employer contribution	(7,918)	(7,095)
Added to staff costs (see note 5)	3,781	3,136
Projected return on employers assets	(9,987)	(10,901)
Actual return on employer assets	7,253	8,330
Taken to interest (payable)/receivable, see note 7)	(2,734)	(2,571)

22. Related party transactions

SEPA is a non-departmental public body sponsored by the Scottish Government Directorate for Environment and Forestry. The Scottish Government is regarded as a related party. During the year, SEPA has had various material transactions with the Scottish Government and with other entities for which the Scottish Government is regarded as a parent body (note 2, 13 & 14 refers). During the year, apart from their service contracts, no Board Member, key manager or other related parties have undertaken any material transactions with SEPA. Board Member Declarations of Registered Interests is published on the SEPA website www.sepa.org.uk/about-us/how-we-work/our-board/members/

23. Fees and charges

The table below highlights the related activity costs against income received by charging schemes.

Schemes

Year to 31 March 2016	COMAH £000	CRC £000	AVIA £000	PPC A £000	PPC B £000	RSA £000	WM £000	SPW £000	ETS £000	WEWS £000	TOTAL £000
Income	103	169	9	4,376	1,325	2,514	5,400	1,733	285	21,477	37,391
Expenditure											
Staff Costs	117	21	2	3805	689	1080	4506	97	388	15423	26,128
Depreciation / Cost of Capital	6	1	-	238	40	49	266	4	16	1648	2,268
Bad Debts	-	-	-	1	7	-	30	-	-	-	38
Other Operating Charges	29	81	-	1558	176	784	1336	43	143	5321	9,471
Total Expenditure	152	103	2	5,602	912	1,913	6,138	144	547	22,392	37,905
(Under)/Over Recovery	(49)	66	7	(1,226)	413	601	(738)	1,589	(262)	(915)	(514)
% Cost Recovery	68%	164%	450%	78%	145%	131%	88%	1203%	52%	96%	99%

Key:			
COMAH	Control of Major Accident Hazards Regulations	WM	Waste Management Licensing & Producer Responsibility
PPC	Pollution Prevention Control	SPW	Special Waste
ETS	EU Greenhouse Gas Emissions Trading	WEWS	Water Environment and Water Services Act
RSA	Radioactive Substances Act	CRC	Carbon Reduction Commitment
AVIA	EU-ETS Aviation		

Schemes

Year to 31 March 2015	COMAH	CRC	AVIA	PPC A	PPC B	RSA	WM	SPW	ETS	WEWS	TOTAL
	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000
Income	125	173	11	4,397	1,271	2,350	5,039	1,686	291	20,997	36,340
Expenditure											
Staff costs	147	73	2	3,597	675	1,151	4,592	137	251	15,534	26,159
Depreciation / cost of capital	7	2	-	219	41	47	255	6	8	1,644	2,229
Bad debts	-	-	-	4	9	-	37	-	-	-	50
Other operating charges	31	79	-	1,403	157	686	1,214	51	101	5,029	8,751
Total expenditure	185	154	2	5,223	882	1,884	6,098	194	360	22,207	37,189
(Under)/Over recovery	(60)	19	9	(826)	389	466	(1,059)	1,492	(69)	(1,210)	(849)
% Cost recovery	68%	112%	550%	84%	144%	125%	83%	869%	81%	95%	98%

Key:		
COMAH	Control of Major Accident Hazards Regulations	WM
PPC	Pollution Prevention Control	SPW
ETS	EU Greenhouse Gas Emissions Trading	WEWS
RSA	Radioactive Substances Act	CRC
AVIA	EU-ETS Aviation	
		Waste Management Licensing & Producer Responsibility
		Special Waste
		Water Environment and Water Services Act
		Carbon Reduction Commitment

24. Resource limit- outturn 2015 - 2016

Year to 31 March 2016	2016			2015
	Outturn £'000	Budget £'000	Variance £'000	Variance £'000
Department Expenditure Limit (DEL)				
Total capital resource	1,706	1,710	4	1
Operating resource - cash	35,208	35,246	38	337
Prior period adjustment	-	-	-	(271)
Depreciation/impairments – non-cash	3,173	3,142	(31)	(32)
Total operating resource	38,381	38,388	7	34
Total DEL expenditure	40,087	40,098	11	35
Annually Managed Expenditure Limit (AME)	7,746	6,210	(1,536)	36

There was an underspend in year against the Departmental Expenditure Limit (DEL) allocated to SEPA by Scottish Government of £11,000. Operating DEL was £7,000 underspent and capital resource DEL was underspent by £4,000.

Additionally, there was Annually Managed Expenditure (AME) of £7,746,000: against an AME of £6,210,000, and an overspend of £1,536,000. The £7,746,000 consists of: £6,229,000 IAS 19 adjustments for pension liabilities, and a reduction in market value movements on properties £1,656,000, offset by cash expenditure incurred, and accounted for as operating resource of £139,000.

SEPA received £182,000 in fines and penalties that were paid over to the Scottish consolidated fund in year (2014-2015: £116,000).

25. Segmental analysis for year to 31 March 2016

SEPA only operates in Scotland and is currently organised into portfolios.

Portfolios	Oper- ations	Science & Strategy	Chief Exec	Govern- ance	Resour- ces.	Finance	Corp.	LIFE ²⁴	Total
Extracted from period 12 Monthly Financial Report									
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Income:									
Revenue from charging Schemes	--	-	-	-	-	-	37,376	-	37,376
Other income	-	-	-	-	-	-	5,260	486	5,746
Total income	-	-	-	-	-	-	42,636	486	43,122
Less expenditure per Corporate Management Accounts									
Staff costs	26,098	22,566	179	2,081	1,634	978	738	97	54,371
Other operating charges	5,079	10,262	31	627	6,394	344	685	384	23,806
Depreciation and impairment	-	-	-	-	-	-	3,173	5	3,178
Total expenditure	31,177	32,828	210	2,708	8,028	1,322	4,596	486	81,355
Net expenditure for year	(31,177)	(32,828)	(210)	(2,708)	(8,028)	(1,322)	38,040	0	(38,233)
Reconciliation to annual accounts									
Decrease in capital charges & impairment in asset values									5
Add pension scheme adjustment to staff costs									(3,781)
Add pensions interest adjustment									(2,734)
Add additional accruals									(154)
Less unfunded pensions decrease in provision									285
Less pension paid in year transferred to provision									139
Net expenditure for the year									(44,473)

²⁴ LIFE projects are reported independently of the portfolio monthly financial report

Segmented assets and liabilities at 31 March 2016

Portfolios	Oper- ations	Science & Strategy	Chief Exec	Govern- ance	Resour- ces	Finance	Corpor- ate	LIFE ²⁵	Total
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Segment assets									
Non-current assets	185	11,055	-	-	16,180	-	-	-	27,420
Assets for sale	-	-	-	-	-	-	560	-	560
Trade receivables	-	-	-	-	-	-	3,332	-	3,332
Cash	-	-	-	-	-	-	777	607	1,384
Total liabilities	-	-	-	-	-	-	(54,498)	-	(54,498)
Total net assets	185	11,055	0	0	16,180	0	(49,829)	607	(21,802)

Segmented accounts year to 31 March 2015

Portfolios	Oper- ations	Science & Strategy	Chief Exec	Govern- ance	Resour- ces	Finance	Corpor- ate	LIFE	Total
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Income:									
Revenue from charging schemes	-	-	-	-	-	-	36,340	-	36,340
Other income	-	-	-	-	-	-	5,049	680	5,729
Total income	-	-	-	-	-	-	41,389	680	42,069
Less expenditure per corporate management accounts									
Staff costs	25,285	21,812	182	1,678	1,530	854	383	274	51,998
Other operating charges	6,037	10,393	60	292	5,971	548	1,053	393	24,747
Depreciation and impairment	-	-	-	-	-	-	3,182	13	3,195
Total expenditure	31,322	32,205	242	1,970	7,501	1,402	4,618	680	79,940
Net expenditure for year	(31,322)	(32,205)	(242)	(1,970)	(7,501)	(1,402)	36,771	-	(37,871)

Reconciliation to annual accounts

Increase in capital charges & impairment in asset values	(662)
Add pension scheme adjustment to staff costs	(3,136)
Less cash spend on unfunded pensioners that has transferred to the balance sheet	142
Add pension adjustment for unfunded pensioners	110
Add pensions interest adjustment	(2,571)
Less late accruals*	(126)
Less prior period adjustment	272
Net expenditure for the year	(43,842)**

*The figure published in the Annual Accounts 2014-2015 has been amended to reflect a rounding adjustment.

**The net comprehensive net expenditure for the year, net expenditure of £43,116,000 plus net loss on revaluation of property plant and equipment of £726,000 equals the £43,842,000 shown above.

²⁵ Managed as separate project

Segmented assets and liabilities at 31 March 2015

Portfolio	Oper- ations	Science & Strategy	Chief Exec	Govern- ance	Resources	Finance	Corpor- ate	LIFE	Total
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Segment assets									
Non-current assets	226	12,051	-	-	17,855	-	-	-	30,132
Assets for sale	-	-	-	-	-	-	900	-	900
Trade receivables	-	-	-	-	-	-	3,474	-	3,474
Cash	-	-	-	-	-	-	412	1,161	1,573
Total liabilities	-	-	-	-	-	-	(88,187)	-	(88,187)
Total net assets	226	12,051	-	-	17,855	-	(83,401)	1,161	(52,108)

5. Appendices

5.1 Appendix one



SCOTTISH ENVIRONMENT PROTECTION AGENCY

DIRECTION BY THE SCOTTISH MINISTERS

1. The Scottish Ministers, in pursuance of Section 45(2) of the Environment Act 1995, hereby give the following direction.
2. The statement of accounts for the financial year ended 31 March 2006, and subsequent years, shall comply with the accounting principles and disclosure requirements of the edition of the Government Financial Reporting Manual (FReM) which is in force for the year for which the statement of accounts are prepared.
3. The accounts shall be prepared so as to give a true and fair view of the income and expenditure and cash flows for the financial year, and of the state of affairs as at the end of the financial year.
4. This direction shall be reproduced as an appendix to the statement of accounts. The direction given on 19 March 2001 is hereby revoked.

Richard Grant

Signed by the authority of the Scottish Ministers

Dated 9 December 2005

5.2 Appendix two

Scottish Government directions to SEPA in 2015-2016

The Scotland River Basin District (Quality of Shellfish Water Protected Areas) (Scotland) Directions 2015	2015	Section 40(1) of the Environment Act 1995, section 2(6) of the Water Environment and Water Services (Scotland) Act 2003	1 April 2015
The Solway Tweed River Basin District (Standards) (Scotland) Amendment (No.2) Directions 2015	2015	Section 40(1) and (2) of the Environment Act 1995 and section 2(6) of the Water Environment and Water Services (Scotland) Act 2003 revokes The Solway Tweed River Basin District (Standards) (Scotland) Amendment Directions 2015	14 September 2015
The Scotland River Basin District (Standards) Amendment Directions 2015	2015	Section 40(1) and (2) of the Environment Act 1995 and Section 2(6) of the Water Environment and Water Services (Scotland) Act 2003	14 September 2015
The Cross-Border River Basin Districts (Scotland) Directions 2015	2015	Sections 40(1) and (2) and 122(2) of the Environment Act 1995 and Section 2(6) of the Water Environment and Water Services (Scotland) Act 2003 revokes The Cross-Border River Basin Districts (Scotland) Directions 2014	14 September 2015
The Reservoirs (Disclosure of Information) (Scotland) Directions 2015	2015	Exercise of powers conferred by section 104 of the Reservoirs (Scotland) Act 2011	1 October 2015

5.3 Appendix three

Greenhouse gas emissions 2015-2016 – technical data

Table 1 – SEPA's detailed overall emissions by source 2014-2015 and 2015-2016

Source	CO ₂ e 2014- 2015 (kg)	CO ₂ e 2015- 2016 (kg)	Unit Change	% Change
Grid Electricity (generation)	1,857,615	1,536,553	-321,062	-17.3
Grid Electricity (Transmission & Distribution losses)	162,437	126,863	-35,574	-21.9
Natural Gas	263,149	229,935	-33,214	-12.6
Kerosene - Burning Oil	14,017	15,522	1,505	10.7
Diesel	189,541	186,470	-3,071	-1.6
Petrol	31,600	25,881	-5,719	-18.1
Car - diesel (average)	293,715	263,470	-30,245	-10.3
Car - petrol (average)	175,437	139,537	-35,900	-20.5
Car - hybrid (average)	62	611	549	885.5
Car - LPG (average)	10,309	7,797	-2,512	-24.4
Car - Electric Vehicle	0	534	534	n/a
Rail (National rail)	95,362	91,450	-3,912	-4.1
Ferry	3,300	2,210	-1,090	-33.0
Domestic flight (average passenger)	35,646	31,431	-4,215	-11.8
Short-haul flights (average passenger)	23,105	37,646	14,541	62.9
Long haul flights (average passenger)	0	14,021	14,021	n/a
Diesel for the Sir John Murray survey vessel	116,588	117,051	463	0.4
	3,271,883	2,826,982	-444,901	-13.6

Table 2 – Greenhouse gas (GHG) emissions from waste 2015-2016

Waste	GHG impact (kg CO ₂ e)	The use of conversion factors supplied by Zero Waste Scotland allows us to quantify the environmental benefits from waste prevention, particularly recycling. These factors form the foundation of the Carbon Waste Metric and are based partly on a consumption approach to carbon accounting. They include the impact of producing materials, as well as the impact of disposing of them, creating a more complete picture of the impacts from waste.
General waste ¹	242,449	
Paper	8,507	
Cardboard	380	
Glass	10,511	
Metal Cans	737	
Plastics	6,058	
WEEE ²	4,286	
Batteries	460	
Food	23,150	
Total	296,538	
¹ General waste is composed of landfill, MRF/EFW and Mixed recyclables ² WEEE = Waste Electronic and Electrical Equipment		