

Environment Agency

Annual report and accounts for the financial year 2018 to 2019

Environment Agency Annual Report and Accounts for the financial year 2018-19
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We are the Environment Agency. We protect and improve the environment.

We help people and wildlife adapt to climate change and reduce its impacts, including flooding, drought, sea level rise and coastal erosion.

We improve the quality of our water, land and air by tackling pollution. We work with businesses to help them comply with environmental regulations. A healthy and diverse environment enhances people's lives and contributes to economic growth.

We can't do this alone. We work as part of the Defra group (Department for Environment, Food & Rural Affairs), with the rest of government, local councils, businesses, civil society groups and local communities to create a better place for people and wildlife.

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Chair's Foreword

This report shows the Environment Agency is not only facing the world's climate emergency head on, it is unlocking opportunities for the economy as it goes.

In October 2018, the Intergovernmental Panel on Climate Change said there are 12 years to bring global temperature rise within 1.5°C of pre-industrial levels. So, every year is critical to ensuring the country is resilient to extreme weather, reducing carbon emissions towards net zero, and protecting and enhancing the natural environment.

Last summer was the hottest on record. We responded to a record 329 dry weather incidents. At the time of writing, we are entering another period of prolonged dry weather, so this could be the new normal.

On average, we close more than 2 illegal waste sites every day. We are pleased with new powers to lock up sites, force rogue operators to clear them up, and seize and destroy vehicles being used in waste crime. We will continue to work with businesses and the public to make sure they understand their own responsibility for the waste they produce.

We have embraced the ambitions of the 25 Year Environment Plan and Clean Growth Strategy, and are excited about the possibilities presented by the new Environment Bill. My colleagues have also shown great professionalism as they supported the country's contingency preparations for a No Deal Brexit.

In May, we launched a new draft strategy for dealing with flooding and coastal change. We outlined an agile approach to ensure the country is preparing for a range of climate futures, including a 4°C rise in global temperatures. By 2022 the Environment Agency will work with partners to explore and develop the concept of standards for flood and coastal resilience, and will consider the pros and cons of all options. This will feed into the government's flood policy statement in 2019. That means building traditional protection schemes, adapting to future threats not previous records, and building back better so people can return to normal more quickly after a flood incident. Flood resilience is necessarily place based, but this is an internationally leading approach that will inform countries and businesses for years to come.

It is not enough to only adapt. We won't keep up with the pace of change if we don't reduce emissions to zero. Our new contract arrangements for delivering flood and coastal schemes ensure our partners are innovating low carbon solutions for construction projects. These arrangements also mean partners will have to map the benefits of their processes against the UN Sustainable Development Goals. In last year's report, I explained how many aspects of our work mirror the Goals; the construction of the Boston Barrier is a good example. By steering operations in this way, we aim to demonstrate the links between sustainability goals and business opportunities.

While we take action with partners on the ground, the Environment Agency Pension Fund has raised international standards by showing that you can put in a strong financial performance and also influence companies to reduce their carbon emissions. We now think adaptation needs to inform our calculations. This year, the EA pension committee has been asking questions at the AGMs of major companies to discover whether they are sufficiently preparing for the escalating physical risks of climate change. This new approach is a sensible precaution to protect employees' pensions.

The decade between 2020 and 2030 will be crucial in terms of reducing emissions, increasing climate resilience, and avoiding ecological breakdown. The brilliant people of the Environment Agency are committed to making every single one of those ten years count.

Thank you to them for another excellent year of hard work and achievement.

Emnathward Bayd

Emma Howard Boyd, Chair Date – 10 July 2019



Performance report

Chief Executive's statement

The Environment Agency has been improving the environment for people and communities for more than twenty years and this year was no exception. We continue to protect against flooding, make sure developments are sustainable, drive down waste crime, and create new habitats and more.

We know that climate change is the single biggest threat to us and our environment. We are already seeing all of its effects. Unless we tackle them, they will have profound and potentially terminal consequences for everything that matters to us. That is why the Environment Agency has now put climate change at the heart of all that we do. We are responding both to its immediate threats, and doing longer term planning to adapt and reduce the impact, so that our country is protected now and for future generations.

Alongside this we have continued to focus our energy on promoting green growth, so that our environment is protected and our economy thrives.

As climate change bites, we are seeing more extreme weather events. 2018-19 saw drought and prolonged dry weather, bringing with it a significant increase in the number of environmental incidents we responded to. And it brought about a unique challenge for us, testing our incident capabilities in a different way - preparing to leave the EU without a deal.

Since the referendum result the EA has been working to ensure we have a smooth exit from the EU. Alongside this, as Government stepped up its preparation for No Deal, we rightly invested more of our people and time into planning for this scenario. Part of our culture is 'think big, act early and be visible'. This shaped our response to EU Exit and we were ready for the different eventualities, supported Defra with people, skills and knowledge for the Government's preparation and were active partners in the local resilience forums' planning across the country.

We remain committed to the wellbeing and health of our staff, even with the additional pressures we face on our incident response. And this is reflected in two magnificent achievements – retaining our Gold employer status from the Mind mental health charity, and achieving 13th place in the Stonewall Top 100 employers.

This year has been a challenging time. But, the Environment Agency has continued to deliver for the environment. This is down to the people who work for the organisation, who remain committed and dedicated to improving the places that we live in. For this I am incredibly thankful to all of our staff and very proud to be a part of this organisation.



Sir James Bevan, Chief Executive Date - 10 July 2019

About the Environment Agency

The Environment Agency is the leading public body for protecting and improving the environment in England. Our vision is to create a better place for people and wildlife. We have 3 main business areas:

- flood and coastal erosion risk management
- · water, land and biodiversity
- regulation of industry

We work with government, local councils, businesses, civil society groups and communities. Staff in our local offices work closely with organisations and communities to improve the local environment and encourage sustainable development. Appendix A provides more information about the history of the Environment Agency.

On 31 March 2019 we had 10,430 full time equivalent employees. Our annual expenditure for the financial year ended 31 March 2019 was £1.4 billion. The Department for Environment, Food and Rural Affairs (Defra) is the government department that is responsible for our activities and provides most of our funding.

What we do

Our Action Plan – 'Creating a better place: our ambition to 2020' sets out what we want to achieve over the coming years. Our objectives are clear: a cleaner, healthier environment which benefits people and the economy; a nation better protected against natural threats and hazards with strong response and recovery capabilities; and higher visibility, stronger partnerships and local choices.

Our plan sets out how our work will support the Defra strategy that we helped to develop, and contains our success measures.

We use 3 principles to inform all our choices:

- Put people and wildlife first: our goal is to create a better place for them.
- 80/20: focus on the 20% of things that make 80% of the difference.
- Support local priorities: every place and community has its own needs.

Our Action Plan recognises that the challenges of a growing population, more extreme weather, and budget pressures require us to innovate, focus on the things which make the biggest difference and work more closely with our partners.

Our success relies on a positive culture where our staff are trusted and confident to make decisions. To ensure this, we've set out the culture we want - how we do things in the Environment Agency:

- · Yes, if: we take this approach in all that we do
- Think big, act early, be visible
- Seek partnership and show leadership
- Focus on outcomes not processes
- Embrace difference: include everyone
- One team: support and trust each other to do the right thing
- Stay safe and grow: we invest in the wellbeing and development of all our staff

In addition to our culture and principles, in the future we will concentrate on making sure our workplace feels right and that it's a life-enhancing place to work. We will have the right people in the right places and offer the right packages to recruit and retain them.

We want our people to embrace and manage risk rather than avoid it. And we will empower them to make the right decisions, using evidence and technology to produce sound solutions. We will also work more closely with the Defra group for the public good.

The Defra single departmental plan

The Defra Single Departmental Plan (SDP) sets out a shared vision and set of strategic objectives for the Defra group for the period up to 2021-22. It is intended to provide staff across the Defra group (including non-ministerial departments, executive agencies, non-departmental and other public bodies) with a clear vision, direction and shared framework. Actions to achieve the strategic objectives are also described in more detail in this business plan.

The 25 Year Environment Plan (25YEP) sets out what the Defra group will do to improve the environment within a generation. The 25YEP details that this will be achieved through adopting a Natural Capital approach to support transparent decision making.

The SDP provides a clear unifying framework for how together we will design and deliver our goals, track delivery and measure success across the whole of Defra. At the heart of the strategy is our shared vision for the Defra group: to be the first generation to leave the environment in a better state than we found it.

Defra group goals are focused on four strategic objectives:

- Deliver a smooth transition to new regulatory and delivery frameworks after we leave the EU
- Pass on to the next generation a natural environment protected and enhanced for the future
- Be one of the world's leading food and farming nations, with a thriving rural economy
- Be the most effective and efficient department in government.

Sustainability in the Environment Agency

Sustainable development lies at the heart of what we do. We aim to carry out our activities, and encourage those of our partners, to be as sustainable as possible, minimising the impacts on people and the environment associated with them whilst taking any opportunities to enhance the natural environment. We include environmental performance measures in our corporate reporting cycle. We have included our sustainability report in Appendix B. This gives a comprehensive overview of important environmental factors such as greenhouse gas emissions and waste produced figures. This reporting is required to be 'fair, balanced and understandable', therefore we show the past three years to give a transparent view of our performance against these measures.

Sustainable Development Goals

Our Performance report is presented within the context of the UN's Sustainable Development Goals. Each performance measure fits within one or more of the goals. We present below other achievements under these goals.



- **1. No Poverty-** We make contributions to this through a number of our flood schemes in deprived areas such as Boston. Poor communities often live in locations at greater risk of flooding and have the least ability to recover.
- **2. Zero Hunger -** This year we launched new farming rules addressing and raising the profile of environmental management on farms. Although the dry weather has also had an impact on these figures. Farmers were able to spread slurry during the dry conditions and start the winter with empty slurry stores. This work has reduced incidents in this area from 75 to 65.





- **3. Good Health and Wellbeing –** Our work to regulate emissions to air, land and water from industry makes a direct contribution to delivering on this goal. Our work to reduce flood risk reduces health impacts of dirty water entering homes, as well as removing the mental health pressures associated with being at risk from flooding.
- **4. Quality Education –** We inform the public on flood readiness, deliver talks at local schools on our flood and coastal erosion risk management work and work with others to communicate the need for reduction in plastic use. Alongside this we have increased opportunities for our staff through access to apprenticeships.



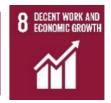


- **5. Gender Equality –** Our work to ensure we have a diverse workforce makes a direct contribution to this goal. We have targets for the proportion of female executive managers and publish data on our gender pay gap.
- **6. Clean Water and Sanitation –** This year we have enhanced 1,719km of the water environment. Our regulatory work has delivered many other recent enhancements. We have improved infrastructure and treatment facilities to tackle diffuse and source pollution. This focuses on farms and urban communities, as this has the largest impact.





- **7. Affordable and Clean Energy –** We make a contribution to this goal by generating our own renewable power. Last year we generated around 400,000 Kwh of power. Energy efficiency improvements rolled out across our estate this year will save 180 tonnes of carbon emission and approximately £70k.
- **8. Decent Work and Economic Growth –** We make a contribution to this goal through delivering on several of our scorecard measures including providing a safe place to work and managing our money efficiently. We have a target for the proportion of our supply chain to be small and medium enterprises.





- **9. Industry, Innovation and Infrastructure** We help planning authorities make informed decisions on proposed developments. In 2018/19 we sampled 15% of responses and we successfully influenced 97% of planning proposals. We have influenced the creation of resilient, connected communities, to meet our goal for people and wildlife to be healthy and thrive.
- **10. Reduce Inequalities –** This goal has strong links with Goals 1 and 5. For those people classified as being at flood risk 67% are classified as "socially vulnerable".





11. Sustainable Cities and Communities – Our work managing flood risk, delivery of 410 hectares of new priority habitat areas and influencing planning applications all make contributions to achieving this goal.

12. Responsible Consumption and Production – We make a significant contribution through our regulation and advice as well as how we carry out our incident response role. We continue to reduce our consumption and our carbon footprint, including through our procurement activity with our suppliers.





13. Climate Action – We seek to influence our many partners to maintain a focus on climate change and adaptation, and help mitigate climate change through our work to regulate industry and reduce CO2 emissions. Our flood defence schemes help communities adapt to the increasing risk from climate change.

14. Life below Water – Our work improving water quality, improving habitat and reducing pollution incidents all contribute to this goal as well as other goals such as goal 15.





15. Life on Land – Our work on flood defence and other schemes has created 410 hectares of new habitat. In partnership we have created 28 hectares of blanket bog and restored a further 575 hectares on our "Moors for the future" project. These projects have also reduced flood risk to local communities, showing the interconnectedness of the goals.

16. Peace, Justice and Strong Institutions – We prosecute those responsible for environmental crimes and so both reduce the impact of waste crime on local communities and help to ensure a level playing field for legitimate businesses.





17 Partnerships for the Goals – We take a partnership approach in delivering much of our flood risk management. This is illustrated in the case study below which also highlights how one scheme and its approach has contributed to multiple goals. We maximise our delivery against the goals by starting with the goals in mind and seeing which other actors in an area we may partner with.

About the Performance Report

This performance report outlines the Environment Agency's performance against our priorities for the financial year from 1 April 2018 to 31 March 2019 (referred to throughout as 'this financial year'). It follows the structure of our corporate scorecard (reported quarterly), and includes examples of how we are meeting our objectives. A summary of the performance against these measures and their targets are shown in Appendix C. Our Action Plan and corporate scorecard are on GOV.UK (www.gov.uk).

Performance Measures

A cleaner, healthier environment, benefiting people and the economy

The water environment is healthier







Healthier rivers, lakes and coastal waters

This financial year we set an ambitious target of enhancing 2,000km

of the water environment. We have achieved significant outcomes this year in challenging circumstances. The impact of the prolonged dry weather was significant over the summer and autumn. We are still feeling the impacts of responding to incidents and recovery work in this period.

This year we have enhanced 1,719km of the water environment against our target of 2,000km. We have always stretched ourselves, as our target last year was 1,500km. This is still a great achievement and a great outcome for the environment.

Our regulatory work has formed many recent enhancements. We have improved infrastructure and treatment facilities to tackle diffuse and source pollution. This focuses on farms and urban communities, as this has the largest impact. A project on the River Thame saw 44 km of enhancements in water quality. This was through direct improvements in the sewage treatment works.

Other notable projects include an extensive moorland restoration project in the North West. Our work here has improved downstream water quality, for Salmon.

We protect people, the environment and wildlife by reducing serious pollution incidents







Serious pollution incidents

The number of serious and significant pollution incidents (known as category 1 and 2 incidents), increased to 493 in 2018-19 from 432 incidents in the prior year partly due to the prolonged periods of dry and hot weather in 2018-19. These intensified the environmental impact, particularly with smaller incidents, with more arising due to the conditions. This has also led to increased numbers of fish kills due to low water flows and reduced oxygen levels.

Four sectors accounted for 66% of all category 1 and 2 incidents in 2018/19. Water companies, illegal waste sites, agriculture and other non-regulated sectors. We saw increases in incident numbers for illegal waste management and water companies. This increased from 46 to 69 incidents for waste management and from 58 to 69 incidents for water companies. We are improving our audit procedure and how we inspect water companies.

Our continuing work from last year has helped to reduce pollution incidents. We launched new farming rules addressing and raising the profile of environmental management on farms. However the dry weather has also had an impact on these figures. Farmers were able to spread slurry during

the dry conditions and start the winter with empty slurry stores. This work has reduced incidents in this area from 75 to 65.

We create new habitats





In 2018-19 we exceeded our target of 410 hectares of new priority habitats, delivering 460 hectares. We define priority habitats as those most threatened, and requiring conservation action under the UK Post-2010 Biodiversity Framework. Our work includes flood and coastal risk management, river restoration maintenance projects, and environmental regulation. Habitat creation projects also reduce soil erosion and provide recreation and climate change adaptation in addition to their primary role.

This year we have continued to work with our partners. These include Natural England, local authorities, National Trust and water companies. With partners we created 28 hectares of blanket bog and restored a further 575 ha on our Moors for the future project. This project has many benefits including reducing downstream flood risk. This slows the flow whilst filtering the water, meaning water companies can use less chemical treatment. The project will also lead to an increase in biodiversity, to promote our native species and help store carbon to mitigate the impacts of climate change.

Challenge of plastics in our oceans

The Plastics and Sustainability team, based in Devon, Cornwall and the Isles of Scilly, is dedicated to the reduction of plastic polluting our land, rivers and seas.



As part of the team's programme plan we participated in the North Devon Pioneer Project with the launch of the UK's first WasteShark at Ilfracombe Harbour in March 2019. The marine robot's aim is to rid the sea of waste, including plastic, and if used five days a week the WasteShark could collect in excess of 15 tonnes of waste a year, with the plastic recycled to make products.

We reduce the number of high risk illegal waste sites





Our priority is to reduce the impact of waste crime on local communities and to ensure a level playing field for legitimate businesses.

This year we received additional money from government to help us in this important goal. We used this to hire more staff and improve our processes to deliver results. During 2018/19 we saw a reduction in high risk illegal waste site numbers from 259 to 250. Although this is not as big a reduction as we were aiming for, it is an improvement on performance compared to 2017/18. The additional staffing is now largely in place, and we expect to see the benefits come through in 2019/20 and beyond.

We made 77 successful waste crime prosecutions in 2018/19. This work resulted in 8 prison sentences and total fines approaching £450k.

During the year we participated in a review into Serious and Organised Waste Crime initiated by the Secretary of State and collaborated with government colleagues in drafting the Tackling Waste Crime chapter of the Resources and Waste Strategy which they published in December. Implementation of the recommendations in both will improve our ability to minimise the impact of waste crime in the future.

We reduce the risk of flooding for more households







This financial year we've completed lots of great projects to reduce flood risk to communities and businesses. We have better protected 50,754 homes during 2018-19. Since our 6 year Capital programme started in April 2015, we have better protected 193,604 homes. We expect to achieve our six year target of better protecting 300,000 households by March 2021.

Successful work this year includes the tidal flood defence barrier in Ipswich. The £70 million scheme helps to keep the town safe from tidal surges and storms. A 200-tonne barrier, is in place and we can move this to meet a rise in water levels in minutes. This work better protects 1,600 homes and 400 businesses from flooding and the impacts of climate change over the next century.

We supported Lancaster City Council to build a new wave reflection wall in Morecambe. This forms a high level tidal flood defence over the majority of the town's frontage. The scheme reduces the risk of flooding for 11,400 residential properties, 2,246 commercial properties major highways and promenade infrastructure. This has helped to protect tourism and increased recreational benefits.

Since 2017 the Flood Action Campaign has targeted those aged 18-34 in at-risk areas. The campaign created a simple "Prepare, Act, Survive" flood plan to help people understand what to do in flood. Since then awareness of flood risk in this age group has increased from 31% to 49%, bringing them in line with older, more flood aware audiences.

We maintain our flood and coastal risk management assets at or above the target condition





We maintained 97.9% of flood risk management assets at their required condition for high consequence systems. Flood risk management assets include embankments, storage areas, flood gates and sluices. A high consequence system is a group of assets in a specific location, where if the assets failed there would be significant impacts.

We have increased the number of assets above the required condition by over 1,600 this financial year. This is a result of increased funding in asset management and directly allocating this funding to where it has the greatest benefit, such as assets that are below the required condition. Where assets are below the required condition this identifies that work is required, it does not mean that they have structurally failed or that their performance in a flood would be compromised. If the performance of an asset is reduced, we will take action to ensure that flood risk is effectively managed until the asset is repaired or replaced.

Mind workplace wellbeing index recognition

We continue to prioritise how we manage health and wellbeing risks. We were rewarded with the mental health charity Mind's workplace wellbeing index gold award, and judged the number one employer in the index. We have since acted on Mind's recommendations to further improve our support for the mental health of our people.



We have a first class incident response capability













We continue to embed our new incident response capability framework, following our Major Incident Ready initiative in 2016. We

have now exceeded our target of 6,500 people trained and ready to respond to incidents, including 700 flood support officers. During the most severe storm this winter, Storm Brian, we protected 1,250 properties in Devon, Cornwall and the Isles of Scilly, through our actions and defences. We have also prepared for an approaching drought and responded to serious chemical incidents, very large fish kills, animal disease outbreaks, major fires and numerous other environmental incidents.

Over 12,700 new customers signed up to our flood warning service in 2018-19. Over 1.5 million properties can now receive our flood warnings.

We successfully influence planning decisions by local planning authorities





Our new measure considers how influential we are as advisors in the planning decision-making process. We help planning authorities make informed decisions on proposed developments. We assess the potential harm and risk, from environmental factors, to life and property. We often request planning conditions or more information to make proposals acceptable. If the environmental harm is too great then we will object, or make suggestions to improve conditions.

In 2018/19 we sampled 15% of responses and we successfully influenced 97% of planning proposals. This was against a target of 97%. We have influenced the creation of resilient, connected communities, to meet our goal for people and wildlife to be healthy and thrive. Our influential work had a direct effect through the 2,800 planning consultation. We ensured the quality of our rivers and groundwater.

Our review of the 2,800 planning consultations enabled the sustainable development of over 50,000 new residential units, and facilitated the creation of new jobs, as well as protecting important environmental services such as drinking water supplies, priority habitats and species, and designated conservation sites. We have ensured the quality of our rivers and groundwater, helped bring land back into beneficial use by advising on the remediation of land contamination, and ensured that new and existing land and properties are protected from the risks of flooding.

Shoreham Tidal wall scheme

The Shoreham Adur Tidal Walls scheme reduces the risk of flooding to over 2,300 homes and 169 commercial properties from the tidal River Adur. It protects local infrastructure such as road network, railway line and Brighton City Airport, which are vital to the town's economy. The scheme contributes to the Environment Agency's national target to reduce the risk of flooding for at least 300,000 homes by 2020/21.



The scheme covers 7.2 km of the River Adur. The works have been divided into ten reaches of various designs (steel sheet piled walls, groynes, flood glass, concrete walls and earth embankments). It also provides 1.4 ha of compensatory saltmarsh habitat. Construction works started in September 2016 and were completed in February 2019.

The £45 million project is partnership funded with a £6 million contribution from Coast to Capital/Local Enterprise Partnerships, £0.7 million contribution from Adur District Council and £0.4 million from West Sussex County Council. The remainder comes from Grant in Aid from central government.

The Adur Tidal Walls scheme represents a genuine success in partnership working. Only by coming together and finding a solution to meet the costs have we been able to finance and build this remarkable engineering project. The complex design and construction meant

working on the property of hundreds of stakeholders including 42 houseboats, gardens, an airport, sailing clubs and small businesses as well as public realm areas (footpaths and car parks).

We tailored our consultation in response to feedback and took measures such as challenging the design to address concerns, issuing reinstatement plans prior to construction and providing the community with regular updates.

We have had a dedicated on site Public Liaison Officer who has led the community outreach program and an onsite visitor's centre. As part of the outreach programme there has been community walks, local school visits to see the construction work and take part in a work shop on flooding and flood defences, stalls at local events such as farmers markets, visits to the local guides, cubs and beavers and work experience opportunities for a local college.



We manage our money efficiently





We report on this measure by monitoring the percentage of budget that we have invested. This is considered an appropriate measure, with expenditure being a proxy for delivery of environmental outcomes. We have a major capital and revenue programme of investment projects and carry out detailed planning to ensure these investments are prioritised appropriately. We are subject to a series of strong financial and governance controls that both protect this investment and provide a logistical challenge in delivering the programme of expenditure. The higher the percentage of budget invested, the more we can achieve for the environment. The measure complements our other performance targets.

We invested £1,395m on the environment in 2018-19, with expenditure on both our grant-in-aid and charge funded activities matching our available funding.

We reduce our carbon footprint









Tonnes of Carbon dioxide

Managing our own environmental impact reduces our costs and makes us more resilient to a changing climate, a key commitment of our "e:Mission" environmental

sustainability plan. This financial year we reduced our carbon footprint by 48% against our 2006-07 baseline year, compared to our target of 45% for this year.

We have continued to make improvements to our buildings across our estate. This has been achieved through constructing 9 energy efficiency measures to improve our carbon performance. These range from solar PV and lighting retrofit projects to mechanical blower replacements and building management systems. These projects will save around 180 tonnes of CO2 and save approximately £70k per year, building on the 36% reduction in carbon emissions we have already achieved over the last 5 years. We are also continuing to push the boundaries of what we can achieve in order to meet our ambition of a fully Ultra Low Emission Vehicle (ULEV) fleet by 2025 and also explore opportunities to deliver this sooner. Our lease car fleet is now made up of 10% ULEV's, this is compared to the UK average of just 1%.

We are embracing innovation and continue to use innovative products and techniques in construction including exploring new ways of managing flood risk by working with natural processes, catchment-scale land management and flood resilience. This has enabled us to measure and reduce our carbon footprint from the delivery of our capital programme by 40% between outline design and completion.

As well as our targeted measures on carbon, we have continued to pursue high standards in our procurement activities such as working with our highest risk suppliers to ensure that they are taking action on reducing plastic use. As part of our top ten plastic action plan we have removed avoidable single use plastic items from all of our canteens, replaced single use bottles with aluminium bottles in our Field Operations and through continuing innovation at our laboratories we changed the syringes used for water quality sampling to a cheaper, fully recyclable version, delivering both financial and environmental improvements.

We continue to be successfully certified to the international ISO 14001 environmental management standard.

We have a diverse workforce











% of BAME staff and % of executive manages who are female.

- a) The proportion of our staff who are from a manage Black, Asian and Minority Ethnic (BAME) background
- b) The proportion of our executive managers who are female

In common with other leading employers, we have set targets which show our desire to have a workforce which reflects the UK working age population. We have continued to run our cross-organisational coaching and mentoring programmes for our Black, Asian and Minority Ethnic (BAME), disabled, female, and lesbian, gay, bisexual and transgender (LGBT) employees. To complement these programmes, we ran personal skills, confidence and development workshops for these employee groups. We delivered learning sessions through our growing number of employee

networks, including mock interview training. We also facilitated external cross-organisational networking for members of these networks, and continued our membership of the '30% Club' mentoring scheme, which offers cross-company, cross-sector mentoring to women.

We have launched many new initiatives across our organisation including a 2017 to 2020 Equality, Diversity and Inclusion Strategy and a Race Action Plan. We have also increased our engagement with BAME communities by developing relationships with universities with a significant proportion of BAME undergraduates, executive director-led mutual mentoring, and further work on unconscious bias awareness and mitigation including blind sifting of CVs, where candidates' names are removed. Our recent FCRM recruitment campaign attracted 7.5% new BAME employees. However, because we have relatively low external recruitment levels, only 4% of our workforce are from BAME backgrounds against our stretching target of 14%. We chose to have a demanding target that reflected the BAME proportion of the working population of England, rather than a lower one reflecting the mix of our locations across England. The proportion of our executive managers who are female has increased from 32% 3 years ago to 34% against our 50% target.

We provide a safe place to work





We have kept our focus on Health and Safety in the workplace, with a particular emphasis on mental health and wellbeing. We maintained our Gold status in the MIND index of employers' management of mental health, achieving the best employer award in 2018. We work to better our challenging aspiration, of fewer than 0.11 lost time injuries per 100,000 hours worked. Our best ever performance was 0.11 recorded in 2017/18. This year we achieved 0.13. So we are very close to maintaining our best ever result.

Our 'Safe and Well' programme keeps high standards of health and safety performance. This is not only for Environment Agency employees, but for our contractors and the public as well. We have paid particular attention to sustaining and improving the standards of safety at our assets that the public may access. In this area we saw a significant improvement in 2018/19. We also achieved measurable improvements in our construction supply chain. This was through a programme of audits and support.

Every year our plan addresses our top risks. This year we have further improved how we manage: the risk of violence and aggression towards our staff; exposure to vibration and manual handling risks; safety whilst driving; mental health resilience, and many more issues. In part this was assisted by maintaining regular contact with the Health and Safety Executive. This year they examined our use of herbicides; how we discharge our Client duties in construction work and our management of hand arm vibration syndrome. We have not been the subject of any advice or enforcement action.

Natural Capital

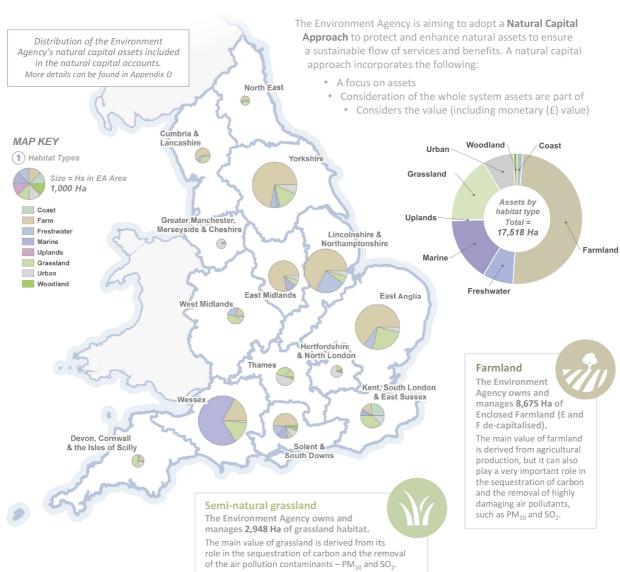
Assessing the natural capital value of the Environment Agency's land holdings

Natural capital is our stock of natural resources such as water, land minerals and forests that supports all forms of life. It is renewable or non-renewable and provides a flow of ecosystem services which benefit people in a wide variety of ways.

Ecosystem services include things like food, clean water, flood risk reduction and opportunities for recreation. People may pay to access some of these benefits or they may be available to society as a 'free' public good.

Natural capital is integral to our economy and wellbeing. We rely on it for food, energy, goods, clean air, clean water and our health. In combination with other types of capital (manufactured, human and social), natural capital forms part of our national "wealth".









and to read the limitations and assumptions please refer to **Appendix D**.

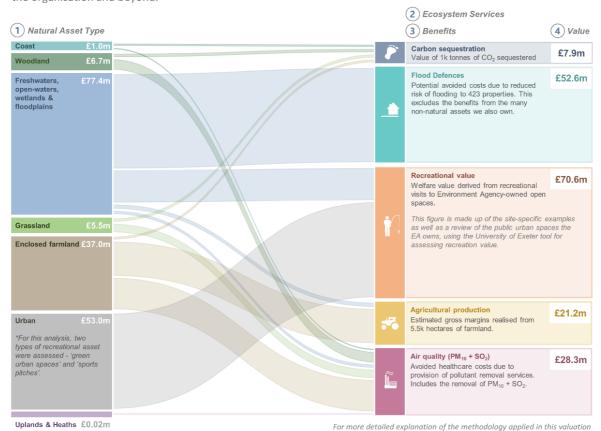




The UK Government's **25-Year Environment Plan**, published in 2018 champions the use of a natural capital approach to better understand the benefits of investments in the environment. **Natural Capital Accounting (NCA)** puts and economic value on the benefits derived from the natural environment. This value presents the longer-term benefits for people from protecting and improving the environment.

Environment Agency Natural Capital Account

We have followed the accounting framework set out by the Government's Natural Capital Committee, and used research funded by Defra to produce a natural capital account for the freehold land we own. Our objective is for this form of reporting to assist us in monitoring and tracking annual changes in the natural capital for which we are directly responsible. We are also exploring opportunities to use the tools and learning we have developed in producing our corporate natural capital account to support the wider use of a natural capital approach both within the organisation and beyond.



Headlines: The Environment Agency owns **17,518 Ha** of land ranging from farmland and grassland to rivers and coasts. This provides **5 ecosystem services** that can currently be quantified. These services are valued at **£180.7m**

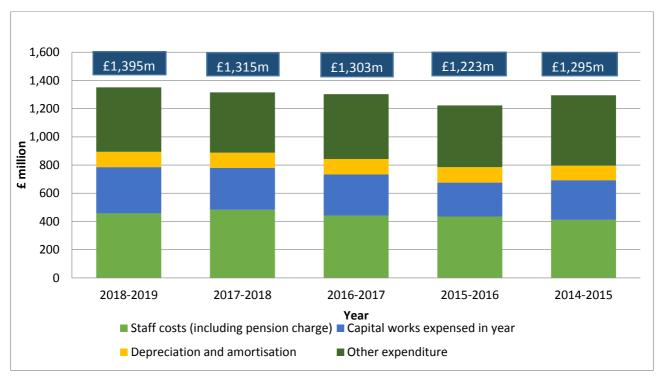


Review of financial performance and funding

Our total gross expenditure for the financial year ended 31 March 2019 was £1,395 million, higher than the £1,315 million in the previous year. Of our total income, 66% came in the form of funding from Defra. The other 34% of income largely came from fees and charges.

Net expenditure for the year after deducting income was £963 million. We are required to treat grant-in-aid cash receipts of £850 million from Defra as a financing contribution rather than income as it was provided by our sponsoring body. Therefore we credit this directly to the general reserve and do not include it in our net expenditure in the financial statements.

Figure 1: 5-year summary of our expenditure as reported in the financial statements



More detail on staff costs, capital works expensed in year and other expenditure is provided in the financial statements in notes 3, 4 and 5 respectively.

Expenditure

Our expenditure by business area is shown in figure 2. Environment and business comprises of water, land and biodiversity, and regulated industry business areas and is largely funded through fees and charges. Further details can be found in table 15 of the Accountability Report. The government makes decisions about Defra funding through HM Treasury's spending review process and a proportion of this funding is then allocated to us. This process sets funding for all government departments. The latest spending review covers the period up to March 2020 and Defra allocates funding to the Environment Agency each year. We receive adjustments to our grant-in-aid funding each year as part of the Defra group planning process.

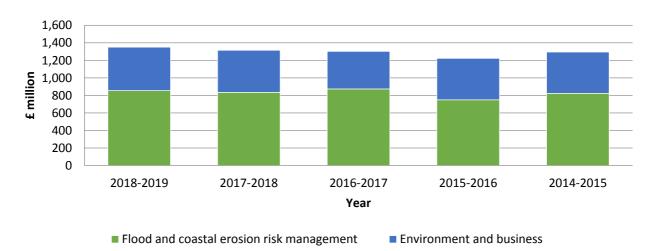


Figure 2: Expenditure by business area

Non-current assets

Non-current assets in the year have increased in value by £61 million. This increase is due to investment in capital assets, such as major flood risk alleviation schemes. The revaluation of our assets using relevant indices and depreciation offset each other in the year. The value of our non-current asset base at 31 March 2019 was £3.2 billion.

We are required to carry out an independent 5-yearly revaluation of our non-operational land and buildings. A revaluation was carried out in March 2016 and we have used indices to revalue our assets to March 2019 values. We consider that the value of assets held in our accounts is not significantly different to their market value. Where there is no market value for the asset, for example for the Thames Barrier, we use a depreciated replacement cost to give the most appropriate valuation of these operational assets.

Going concern

The statement of financial position at 31 March 2019 shows taxpayers' equity of £2.3 billion (at 31 March 2018 this was £2.5 billion. In common with other government non-departmental public bodies, the future funding for our liabilities will be grant-in-aid from Defra and other income. Parliament approves this funding annually.

We have received approval for our grant-in-aid funding for 2019 to 2020 and have a government commitment to our flood and coastal erosion risk management capital expenditure budget for 2020 to 2021 being the last year of a six year commitment. A government spending review is expected to commence in the summer of 2019 to determine funding for government departments including Defra for either a one year financial period for 2020-21 or a three year period from 2020-21 to 2022-23. We have prepared these financial statements on a going concern basis.

J.D. Bevan

Sir James Bevan, Chief Executive

Date - 10 July 2019

Accountability report

Corporate governance report

Statement of Accounting Officer's responsibilities

Under section 45 of the Environment Act 1995, the Secretary of State for Environment, Food and Rural Affairs has directed the Environment Agency to prepare for each financial year a statement of accounts in the form and on the basis set out in the Accounts Direction. The accounts are prepared on an accruals basis and must give a true and fair view of the state of affairs of the Environment Agency and of its income and expenditure, changes in taxpayers' equity and cash flows for the financial year.

In preparing the accounts, the Accounting Officer is required to comply with the requirements of the government financial reporting manual and in particular to:

- observe the Accounts Direction issued by the Secretary of State and HM Treasury, including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis
- make judgements 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 financial statements
- prepare the financial statements on a going concern basis
- confirm that the annual report and accounts as a whole is fair, balanced and understandable

The Accounting Officer of Defra has designated the Chief Executive as Accounting Officer of the Environment Agency. The responsibilities of an Accounting Officer are set out in 'Managing Public Money' published by HM Treasury. These include responsibility for the propriety and regularity of the public finances for which the Accounting Officer is answerable, for keeping proper records and for safeguarding the Environment Agency assets.

The Comptroller and Auditor General, Head of the National Audit Office (NAO), is the statutory external auditor of the Environment Agency. The NAO received no remuneration for non-audit services in the year to March 2019, the same as in the previous year. The fee for the statutory audit is £166,000.

As far as the Accounting Officer is aware, there is no relevant audit information of which the Environment Agency's auditor is unaware. Supported by the Finance Director and the Finance function, the Accounting Officer has taken all steps to make himself aware of any relevant audit information and to establish that the Environment Agency's auditor is aware of that information. The Accounting Officer also takes personal responsibility for the annual report and accounts and the judgments required for determining that it is fair, balanced and understandable.

Governance statement

1. Introduction

The Chief Executive is responsible for maintaining a good system of internal control that supports our aims and objectives, and prevents attempted fraud, corruption or bribery.

This governance report sets out how we have managed and controlled our resources during the year. It provides assurance on how we have carried out our corporate governance, how we have managed significant organisational risks and how we have addressed control issues.

2. Effectiveness of governance arrangements

2.1 The governance framework

The Environment Agency is led by a non-executive Board appointed by the Secretary of State for Defra. The Board ensures that:

- we fulfil our statutory duties
- we follow the directions provided by the Secretary of State
- · we operate with propriety and regularity
- the Environment Agency is an efficient and effective organisation

As of March 2019, ten independent non-executive Board members, including the Chair, sit on the Board. The Chief Executive also sits on the Board. The Board, Executive Directors' team and senior managers review our performance across all our activities and discuss it with Defra. The Chair and Chief Executive meet with the Secretary of State and other Defra ministers regularly. This financial year, the topics discussed during ministerial meetings included:

- EU Exit
- Flood risk management, maintenance and recovery
- Supporting economic growth through planning and permitting
- Illegal waste and the targeting of major problem sites
- Communications
- Defra group transformation
- 25 Year Environment Plan
- Agricultural regulation

2.2 Board duties and responsibilities

The board of directors are responsible for the following:

- Agree strategic direction
- Agree objectives, policies and strategies and the performance of executive management
- Agree internal governance arrangements and structure
- Control and monitor the financial status of the Environment Agency and it's performance
- Ensure an adequate system of financial and other controls are in place and operating effectively
- Ensure sound and proper policies in relation to risk management, health and safety and corporate governance are in place
- Ensure adequate succession and remuneration arrangements are in place

2.3 Committee structure, including Regional Flood and Coastal Committees

The Board has established five committees to help shape and steer our operational duties and functions. Our committee structure is included in Figure 3. The chair of each committee gives an update at Board meetings and raises specific issues to the Board as necessary. The remuneration

report lists the members of each committee and Appendix E shows Board members' attendance at meetings, which remains high.

The Flood and Water Management Act 2010 required us to establish Regional Flood and Coastal Committees (RFCCs). RFCCs raise levies to fund local priority projects. They also work with coastal groups and lead local flood authorities to advise on activities within their catchments and along the coast and to share good practice. We must consult with RFCCs and agree our flood and coastal risk investment programmes and budgets with them. All RFCC meetings are advertised on GOV.UK and members of the public are welcome to attend.

2.4 Executive Directors' team (EDT)

The Chief Executive manages a team of Executive Directors who provide leadership and strategic direction to the organisation (see Figure 3). There is an executive director responsible for each of our three main directorates:

- Flood and Coastal Risk Management
- Environment and Business
- Operations

The Chief of Staff reports to the Chief Executive and is responsible for the Chief Executive's directorate, and oversight of corporate services delivered by Defra and various other organisation wide responsibilities.

The Chief Executive and his team meet weekly and for a full day each month to discuss and make decisions on managing the Environment Agency. They are responsible to the Board for all aspects of performance and risk management. EDT supports the Chief Executive in establishing and maintaining an effective system of internal control within the organisation.

EDT meetings include the Chief of Staff, Director of Legal Services, Deputy Director of Governance and Engagement, as well as the Director of Finance, and the Deputy Directors of Human Resources, Communications and Digital, Data and Technology Services (DDTS), all of whom are now employed by Defra. In addition, an initiative began in 2016-17 to increase the equality, diversity and inclusion of EDT. This provides development opportunities for senior leaders with the Deputy Director (Chief Prosecutor) of Legal Services, Director of FCRM Strategy & National Adaptation and Director of Digital & Skills being part of EDT for the year ahead.

board structure **Environment Agency** Board (members appointed by our sponsor Defra) Pensions Remuneration Flood and **Environment** Audit and Risk Committee Committee Coastal Risk and Business Assurance Management Committee Committee Committee Chief Executive **E&B** Executive Operations **FCRM** Director of Chief of Director **Executive Director** Executive Finance & Staff Director DDs of HR Comms & **DDTS** Director of National National Directors of Directors of Directors Legal Directors Operations Operations Services (National (National (Area (National Services) Services) based based teams x 3) teams x 4) Deputy Deputy Area Deputy Deputy Deputy Directors Directors **Directors** Directors Directors Directors Managers Managers Managers Managers Managers and staff and staff and staff and staff and staff

Figure 3: Environment Agency organisational reporting lines, including committee

2.5 Defra group corporate services

In 2017-18 we transferred responsibility for most of our corporate services functions to Defra. This is part of a wider Defra group transformation programme initiated in response to Defra's spending review settlement for 2015 to 2020. The services transferred were Finance, Human Resources, Communications, Digital, Data and Technology Services, Property Programmes and Corporate Property, Facilities Management, Commercial and oversight of Shared Services Connected Limited (SSCL), the outsourced Finance, HR and Procurement transactional processing centre.

A corporate business forum (CBF) was established prior to the transfer of corporate services. The CBF still forms part of our governance and brings together the Chief of Staff, Director Representatives from across the Agency and the corporate services lead executive manager business partners supporting the organisation. The CBF meets monthly and oversees corporate and cross cutting matters, including the management of risks that are owned by either the EA or Defra and require substantial activity or co-ordination by Defra group corporate services.

A corporate management team reporting to the Chief of Staff supports the CBF and acts to facilitate the smooth running of the partnership between the EA and its corporate services delivered by Defra. Subjects considered during the year include how the partnership agreement between EA and Defra is working, the oversight and commission of Defra transformation projects, the accountability over

major IT systems, delivery of major IT projects, facilities management and performance issues with SSCL.

Some weaknesses have been identified in the oversight of the contract management process for a contract. Concerns were initially identified in 2016-17, however these were not escalated through all the appropriate governance and assurance channels until 2018-19. Since then work has been ongoing to understand the weaknesses and the Environment Agency and Defra are working to investigate the root causes and address any potential financial implications. There are no financial reporting implications for the audited financial statements.

During the course of the year, the commercial team has been working across the Defra group with managers and boards strengthening contract management practice including billing, authorisations and payment processes and to ensure supplier resilience. This has been reviewed by Internal Audit in 2018-19 and will continue as part of the Annual Audit Plan in 2019-20. This has required the auditing of a number of existing supplier contracts. Although this work is ongoing (and will be monitored as part of the 2019-20 audit plan) specific areas identified already and included in the work to strengthen contract management practice are: appropriate use of contractual mechanisms such as open book accounting to manage the risk of charge issues arising; ensuring appropriate governance mechanisms are in place; and ensuring processes for escalations across the Defra group are appropriate and timely.

2.6 Compliance with the corporate governance code

We follow best practice for corporate governance, and have complied with HM Treasury's corporate governance code. Our handbook for Board members reflects this guide, and they are required to make an annual declaration of memberships of other organisations' boards and any conflicts of interest. They also declare any conflicts of interest in relation to specific items on the agenda before every meeting that they attend.

All managers and staff are asked to complete an annual disclosure of interests and discuss any disclosures and potential conflicts of interest with their line manager.

3. Effectiveness of EDT and the Board

In June 2018, the Board conducted its annual evaluation exercise, which included a survey of key attendees of Board meetings. The findings were presented to the Board, to help evaluate and review the way the Board works, and to consider strategic and external issues relevant to the organisation, alongside top corporate risks.

The Board discussed the outcomes of the evaluation exercise and agreed that:

- Strategic discussions should be brought to the Board early in their development in order to provide insight and to shape Environment Agency policy
- Networks of decision makers and influencers should be used to provide leadership and a voice on the environment
- The Board should be dynamic and should use structured informal discussions alongside formal papers and approvals

EDT agreed to postpone its annual evaluation exercise due in February 2019, as the Environment Agency was stopping or slowing all but essential work, to prioritise preparations for EU exit. EDT conducted the evaluation exercise in June 2019 and concluded that:

- Weekly catch up meetings are being used well for rapid effective decision making
- Monthly meetings will have fewer agenda items to enable deeper consideration of matters.

3.1 Data quality

Our data approach supports Directors in understanding and improving the quality of priority data; being the data they are basing their decisions on. The Board is satisfied with the quality of information being used for important decisions, based on its own review and use of the data, as well as comfort provided from internal audits during the year and conclusions of the NAO in its year-end audit completion report around the data that supports the financial statements.

4. Effectiveness of risk management

4.1 Risk management framework

Our approach to risk management is approved by the Board and Executive Directors. The Audit and Risk Assurance Committee (ARAC) has an important role in identifying, monitoring and managing significant organisational risks. EDT assesses, prioritises and manages risks throughout the year and individual directors are responsible for the risks within their business area. Executive directors own the corporate risk register and are responsible for developing, formally reviewing and updating their risk assessments every quarter as well as mitigating the risks they own. Risk areas form regular agenda items at meetings during the year.

Local risk and assurance leads help individual directorates and leadership teams develop their risk and assurance capability. There are processes for two-way communication of new risks, changed circumstances or when action is required.

As we develop closer working relationships across the Defra group, we have adapted our risk management procedures to fit within an integrated group approach to strategic risks. This includes a common risk language and consideration of legal, operational, policy, financial and reputational risks. As well as reviewing risks, we also consider future opportunities.

4.2 Risk appetite

As an organisation we want to strengthen our innovative culture. There is no innovation without experimentation, no experiment without failure, and no chance of ambitious outcomes without at least some risk. So we want to embrace and manage risk not avoid it. For our people to manage risk effectively, it is essential that they understand what our appetite for different sorts of risks is. We have zero appetite for taking risks with the safety of our staff and the public. But we are keen to encourage greater risk-taking in other areas such as experimenting with new ways of working or giving staff greater freedom to make choices.

It is impossible to spell out how much risk we accept in every circumstance: each situation is different. We ask leaders at every level across the organisation to articulate for their own teams where there is scope for more ambition and so risk and where there is not; we want leaders and teams across the country to keep talking to each other so we collectively manage major risks; and we ask all our staff to use their own good judgement in making decisions. Our staff should be confident that we will back them if things go wrong, provided they have followed these principles and actively sought to manage the risks and maximise the benefits. We will recognise and reward leaders, teams and individuals who seek ambitious outcomes, and who innovate and manage risk to achieve them. We celebrate achievements and ensure lessons are shared right across the organisation.

4.3 Effectiveness of risk management

We have a consistent approach to risk management across the organisation. Risk registers and maps are in place for business boards and area leadership teams, which include risk assessments, mitigating measures and an identified person who is accountable for managing the risk. We

distinguish between material issues, such as climate change, and risks that flow from the issues, such as flooding.

We conducted an annual cross-organisation risk review, the results of which were analysed and checked against the corporate risk map. The results were reported to EDT and a Board risk workshop in November 2018, to test the completeness of the corporate risk map. The workshop discussions resulted in agreement that it was no longer necessary to manage the risks around onshore oil and gas regulation at the EDT level and this has been delegated back to the Environment and Business Directorate to own. In addition, it was agreed that a new risk concerning navigation asset condition should be added to the corporate risk register. The risk of insufficient funding to achieve statutory requirements or the demands of government and the public, was expanded from being focused on the environment and business activities of the Environment Agency to all areas of activity, including flood and coastal erosion risk management.

One consequence of the transfer to Defra of our Corporate Services is that some risks to the Environment Agency are now managed on our behalf by Defra. This has required us to develop new relationships between those who own risks on behalf of the Environment Agency and those who are managing them. The management of risks during the year is reported in section 6.

5. Effectiveness of the internal control system

5.1 Overview of the internal control system

We follow HM Treasury guidance on internal control, intended to provide reasonable assurance and maintain propriety and regularity of expenditure. This is a proportionate approach and not intended to eliminate all risk of failure, so the Accounting Officer can only provide reasonable, not absolute, assurance. Our internal control processes are designed to:

- identify and prioritise the risks affecting our business aims and objectives
- evaluate the likelihood of those risks happening and their likely impact
- manage those risks efficiently and effectively.



Our resource allocation is published in our corporate plan and we report on our in-year progress against objectives and performance targets in our corporate scorecard. The performance report section of this annual report summarises our performance in delivering environmental outcomes and provides assurance on how we have used our resources this financial year.

The Environment Agency's internal control environment is illustrated in the diagram above. Other controls we have to ensure we deliver value for money include:

- all projects over £100k go through an assurance process with review by qualified persons from the appropriate area of expertise using clear investment and appraisal criteria. They are independent of both the proposer and the approver of the expenditure
- external scrutiny of substantial levels of capital expenditure is provided via:
 - Regional flood coastal committees on local investment plans.
 - Reviews by the Infrastructure and Projects Authority of our largest projects.
- The Board has delegated its powers of control over income and expenditure through a financial scheme of delegation (FSOD), which establishes the limits within which individual officers are allowed to approve spending. The FSOD requires consultation with senior business partners from Finance, HR and Commercial. Larger items of expenditure must be referred to and approved by external parties such as the Defra permanent secretary, HM Treasury or Cabinet Office.
- Approximately 85% of procured expenditure goes through our Commercial teams or the frameworks they have provided. Of the other 15% approximately half is made up of fixed items like rent, service charges and reservoir operating agreements. The other half is made up of some central contract expenditure vetted by a finance compliance team and items procured via government procurement cards subject to line manager approval and sample testing by the compliance team.

5.2 Audit assurance

Each year EDT and the ARAC agree the annual internal audit plan, taking a risk-based and prioritised approach to identify aspects of the business that should be audited.

The Accounting Officer is advised on internal control matters through audit reports (and other papers and presentations at Executive Directors' meetings). The ARAC also reviews and acts on our internal audit reports as well as reports from the NAO. A large number of audit reports within the audit programme consider matters of compliance and propriety and provide assurance on good governance.

The Head of Internal Audit submits an assurance statement to the Chief Executive each year, outlining the adequacy and effectiveness of our risk management, internal control and governance processes, based primarily on our internal audits.

The Internal Audit team provided assurance on the management of risks associated with over 42 business work areas in 2018-19. The team provided an overall 'moderate' assurance rating on the adequacy and effectiveness of our arrangements for corporate governance, risk management and internal control. 'Moderate' means that some improvements are required to enhance the adequacy and effectiveness of the framework of governance, risk management and control.

Whilst equivalent to the overall opinion given for 2017/18 there has been a reduction in the number of limited or unsatisfactory individual opinions assigned to audits during 2018-19. As in previous years business engagement during the development of the internal audit programme was strong, whereby known high residual risk areas were identified for inclusion.

The Internal Audit team oversees the self-reporting by Executive Directors to the Chief Executive on their stewardship over selected work areas. This financial year's stewardship topics were data custodianship and learning and development. The number of stewardship statements prepared was lower than in previous years due to the additional pressures arising from EU exit preparations.

Agreed management actions arising from internal audit work are followed up to ensure that they have been properly implemented by their due dates. As expected Internal Audit noted:

- that there has been an increase in requests for extensions to implementation dates, often as a result of EU exit pressures and the associated 'stop and slow' principle adopted by EDT from December 2018 to May 2019; and
- we experienced some difficulty in tracking progress towards the implementation of actions for instance DDTS and Procurement, due to a lack of clarity concerning where ownership for individual actions now sits, either within the Environment Agency or with Defra Corporate Services.

We act on the recommendations made by the NAO in their management letter and their value-formoney reviews. Recommendations are also made by accredited bodies who review our environmental performance and quality standards.

In February and March 2019, external auditors Societe Generale de Surveillance (SGS) assessed the Environment Agency against the ISO 2015 requirements of the external certifications held for ISO 9001 Quality Management Standard and ISO 14001 Environmental Management Standard. The Environment Agency passed the assessment maintaining registration for both standards. The Environment Agency is also accredited against ISO55001 Asset Management certified in 2018.

6. Significant risks and actions

The following risks and concerns were identified through the processes above and are being actively managed through detailed action plans, each of which is sponsored by an Executive Director or the Chief of Staff.

6.1 Reducing the adverse impacts of major flooding

Flooding is a natural process. While it will never be possible to prevent all flooding, the Environment Agency and our partners are making significant progress to reduce the risks resulting from flooding, whether from fluvial, coastal or surface water incidents. The root causes that might lead to a major flooding event include:

- extreme weather events
- insufficient ability to warn the public of danger
- failing flood defence assets
- inadequate incident management capacity or effectiveness
- absence of flood defences

This year, a number of improvements to our service have been introduced which support government and partner investment in flood and coastal erosion risk management asset protection and help reduce the likelihood and impact of major flooding.

Our six-year capital programme outlines how we will invest the government's commitment to provide £2.6 billion for Flood and Coastal Erosion Risk Management (FCERM) projects to reduce the risk of flooding from rivers, the sea, groundwater, surface water and from coastal erosion, for at least 300,000 homes. At the end of February 2019, we had better protected 193,604 homes since the start of the six-year programme in April 2015.

During the lifecycle of the six-year capital programme, the Environment Agency is investing over £1 billion of Grant in Aid in maintaining our flood risk management assets. During 2018, we inspected over 170,000 flood assets to ensure they remain ready to protect homes and businesses.

We have 40km of temporary flood barriers and 250 high volume pumps (30 of which are ultra-high volume) available for deployment during flooding incidents. Our ultra-high volume pumps have a flow rate of 1500 litres per second, which could fill an Olympic size swimming pool in approximately 33 minutes. These temporary measures work in tandem with the more permanent structures that have been or are under construction or may be used where more permanent measures are not practicable.

We now have 1.4 million people signed up to the flood warning service. We added over 200,000 mobile numbers on the Three network in October 2018 via the Extended Direct Warnings (EDW) service. This summer (2019), we will be working with Vodafone to add more telephone numbers to the flood warning system. Funding has been approved to further expand our flood warning service to the approximately 26,000 properties in high-risk areas that are currently unable to receive a warning.

In October 2018, we launched the 2018/19 Flood Action campaign aimed at 18-34 year olds who live in areas at risk of flooding, asking them to understand what actions to take in a flood and directing them to visit our "Prepare Act Survive" flood plan on GOV.UK. The campaign was deployed in two phases during wet weather – Phase 1 in November 2018 and Phase 2 in March 2019. Initial results show that social media advertising resulted in over 50,000 visits to view the flood plan, with an overall estimated social media reach of 1.5 million.

We supplied new hose connectors to Fire and Rescue Services, providing access to 150km of hose stored around the country and improving our capability to work with our partners to get high volume pumps to the communities that need them.

An independent external review of Multi-Agency Flood Plans (MAFPs) was published on 12 June 2018 on GOV.UK. Since then, we have supported Defra in the Government response to the review, which has now been published. We have worked together with Defra to produce a revised version

of the MAFP guidance, outlining how to create good MAFPs. The guidance and support package is due for release shortly, alongside a risk-specific standard on flood preparedness. This standard will form part of a set of resilience standards to clearly set out expectations and benchmarks for good practice.

We expect inland flood risk to increase throughout this century as climate change influences rainfall patterns and sea levels. Both these will increase flood risk to people, properties, infrastructure and the environment.

6.2 Illegal waste sites

The safe and legal disposal of waste can be expensive, not least because of the level of landfill tax and other financial mechanisms designed to promote recycling. The profit that can be made by avoiding these costs attracts criminal organisations to waste management and disposal. While the majority of operators are responsible, complying with regulations and their permit conditions, there are many sites and activities which are not operated within this framework and which both threaten environmental harm and undercut legitimate operators.

The illegal activity includes operating sites without a permit, mis-describing waste to avoid proper disposal routes and so costs and the illegal export of waste. Those operating permitted sites may fail to comply with the conditions of the permits including operating without proper fire controls, stockpiling waste with no intention of processing or disposing of it properly and abandoning sites full of waste.

There are high public and political expectations of our work to address this issue. High profile waste incidents such as the emergence of new, problematic waste sites or failing to clear abandoned waste may lead to criticism that we are not using our statutory powers effectively or quickly enough. EU exit also impacts on our work in various ways:

- the challenge of illegal waste activity may well increase, should the United Kingdom leave the EU without a withdrawal agreement. Much of our waste is exported for recycling and recovery overseas either legally or illegally and any disruption to transport arrangements could create incentives for criminals to dispose of it illegally in England instead.
- preparations to support EU exit are creating new pressures on all resources (local and national), forcing us to slow down or stop other work, including that to tackle waste crime.

We have secured additional funding to address specific priorities, for instance:

- a further £30 million for tackling waste crime over the period 2018-22 was announced in the November 2017 Budget
- £10 million in the November 2018 Budget to cover the cost of landfill tax incurred in clearing
 waste from abandoned sites over the period from 2019-21. However, this is only one
 element of the costs involved in this work and the remainder has to be found from other
 sources.

There is a risk that we may struggle to use the additional funding effectively as delays in recruitment mean that we underspent the allocation for 2018-19.

While these increases in funding mean our enforcement has been better funded in 2018-19, pressures to reduce our reliance on grant in aid mean that there is also an overall risk that there may be cuts in baseline funding which will reduce our ability to respond to the problems of illegal waste activity in future years.

Defra has recently published a Resources and Waste Strategy which incorporates the findings of the Review of Serious and Organised Waste Crime sponsored by the Secretary of State. The Strategy contains a number of recommendations and commitments to regulatory reform to help tackle waste crime.

In the past year we reduced the number of high risk illegal waste sites and have set ourselves challenging targets to continue to do so, in response to increased resources to address this problem. The awarding of further funding to tackle waste crime shows the Government's confidence in this approach.

6.3 Defra group transformation

Defra Corporate services transformation is gathering pace, with changes at senior levels now implemented for most functions and work underway to implement broader changes. Functions are progressing to different timescales and approaches reflecting their particular needs. The Corporate Business Forum reviews updates each month. Corporate services transformation continues to pose a risk to our ability to deliver, particularly through the loss of corporate knowledge and the pressure placed on Defra corporate services staff.

We conducted a review of the partnership with Defra corporate services, one year on from the transfer of the functions, which identified a balance of issues and successes but established that the period of greatest risk for the Environment Agency would be as Defra corporate services move through transformation. Ways of working in the partnership continue to mature, following the establishment of the Corporate Management Team, to co-ordinate the Agency's relationship with the corporate services. As part of the 1 year post transfer review we have developed an action plan to strengthen the partnership further as transformation goes ahead.

The Environment Agency has a big part to play in making the transformation a success. In the prior year EDT and the Board have been prioritised ensuring all corporate services colleagues continue to feel an integral and valued part of our team.

The financial transparency of the partnership continues to be a risk, which is exacerbated by the impact of EU Exit preparations putting additional demands on Defra corporate services.

The overall change landscape, including the scale and pace of change (exacerbated by EU Exit preparations) continues to have a potentially negative impact on our ability to deliver business objectives in the short term. We are challenging the pace of change where necessary and seeking to balance the time commitment required from the Environment Agency to ensure we maintain our capacity to deal with business as usual requirements, potential incidents and the demands arising from EU exit.

Contingency planning for a possible "no deal" exit has placed additional demands on Defra group, including corporate services. We are working with them to identify the likely impacts and the options for managing them.

We have also been working to manage the risks to the Environment Agency arising from this external provision of corporate services, including sensitive and critical areas such as security and business continuity, via clarity of accountability and regular dialogue with Defra officials.

6.4 Insufficient funding

We may not secure sufficient funding from the forthcoming spending review (SR19) to meet our corporate obligations and objectives. There have been reductions during the SR15 period in public funding for some areas of our own work and for investments in elements of the nation's environment and resilience. There is also pressure on partnership funding for managing flood risk.

Although HM Treasury have not yet issued the formal commission for SR19 submissions, we have begun our preparations by identifying funding needs from business leads and considering current and future requirements, including delivering the aspirations set out in the developing Defra 2030 Vision, meeting new challenges arising from EU exit and securing future investments to deliver the

25 year environment plan and industrial and growth strategies. Part of our preparations will be to test whether our services and investments are efficient and effective, could be delivered by others and will look at alternative funding sources such as charges, levies and partnership funding so that grant in aid is treated as a last resort. This work will provide the foundation for our Future Funding Strategy.

We completed a consultation on proposed charges for 2019-20 in February 2019 and are developing a programme of charge proposals for the next 5 years: we are already developing new charge proposals for water resources and navigation to be implemented in 2020 and 2021.

We are working with Defra colleagues on the Shared Prosperity Fund, which will replace EU funding, and are seeking to maximise partnership funding and investments. We will be trialling a market based mechanism to generate catchment funding in a few locations in 2019-20, following the success of our first trial in Somerset.

We are also developing proposals for promoting innovative financing that could feature in the Government's plans, such as the Green Finance Strategy.

To secure the partnership funding needed to achieve our corporate objective of better protecting 300,000 homes between 2015-16 and 2020-21 we benefit from senior level interventions via our Chief Executive and Chair.

6.5 EU Exit

The UK is due to leave the EU by 31 October 2019 and we have been preparing for the possibility this would be without a withdrawal agreement. Recognising that "no deal" could have serious consequences we have identified the main risks – to our own operations, to those we regulate and the wider community and we have measures to manage those risks. We set up arrangements to handle a no deal scenario as we would with any other major incident. However, putting this effort into managing the consequences of a no deal exit requires us to stop or slow some of our usual work. This and the strain on resources has affected our ability to deliver as we would normally.

We are supporting Defra and BEIS in the delivery of their EU Exit programmes. This includes work on chemicals, fluorinated gases, agriculture and the emissions trading system to enable these regimes or their replacements to continue to operate once we leave the EU.

We are also working with Defra on the Environment Bill, which will set up the new Office for Environmental Protection.

6.6 Staff effectiveness

Our capacity to deliver may be impaired if we do not have:

- the right people in the right places and with the right skills
- good health, safety and wellbeing among our staff
- good staff morale.

We ran the latest all-staff survey in Autumn 2018. The overall engagement score, which measures how committed we are to our organisation and our work, was 72%. That is the highest it has been since we started measuring it. The main findings have been shared with staff and local action plans are being developed to address the issues identified.

We have reviewed and refreshed strategic workforce plans across the organisation. Key priority themes to come from these reviews are: maximising and embedding apprenticeships, further developing a skilled and capable workforce, recruitment and retention, and professionalism. We will continue to address these challenges. This work will feed into the Defra single department plan and strategic workforce plan.

We are unlikely to meet our target for apprenticeships for 2018-19, although we enrolled 55 new apprentices and have a further 40 in the enrolment pipeline. Our strategy is to embed high quality apprenticeships in the EA.

The Environment Agency compares favourably to the rest of the public sector and private sector in absence, according to the 2018 Chartered Institute of Personnel and Development (CIPD) absence survey. The average working days lost in the private sector is 5.6 days and in the public sector it is 8.5 days. For the EA it is 6.2 days (an increase from 5.7 days in 2018).

Our turnover rate is currently 4.4% for permanent employees (excluding any voluntary early release agreements). The UK average is circa 15%. We have pockets of the organisation where turnover is much higher and we will be looking to address this in 2019.

6.7 Navigation

There is a statutory right of navigation along the waterways where we are the navigation authority. The assets supporting the navigation, such as the locks and laybys, are used daily by members of the public, often unsupervised. Public safety will always remain our top priority and any unsafe assets will be closed if required. After decades of underinvestment in the navigations, our asset base is deteriorating which could lead to increased risks to public safety. For example, some of our locks are guillotine gates and are over 100 years old. These gates pose a specific health and safety risk for the public as boats travel under the large four tonne gate when entering and leaving the lock. If one of our critical assets fails and has to be closed for any period of time, it would split the river preventing navigation along its length. We may lose the ability to hold back the water, keeping levels artificially high (impounding it). This will impact other beneficiaries such as water abstractors.

We will seek to address the funding challenge by seeking innovative ways to generate more of our own revenue to invest in maintaining and operating our navigations, through the next government spending review, and by using improved asset data to ensure maintenance programmes maximise effective use of the resources available.

7. Ministerial directions

The Environment Agency received the following Ministerial Directions for 2018:

- The Floods and Water Management (Environment Agency) (Amendment) Direction 2018 replaces Schedule 1 to the Floods and Water Management (Environment Agency) Direction 2017, changing which institutions may receive financial assistance from the Environment Agency, in accordance with Section 70(6) of the Charities Act 2006.
- The Water Abstraction (Transitional Provisions) (England) Direction 2018 directs the Agency to refuse to issue, or impose conditions on, abstraction licences to protect water, strata, flora or fauna from serious damage, and to ensure that licenced water abstraction activity has a neutral environmental impact.
- The Standardised Reporting of Radioactive Discharges Direction 2018 ensures the reporting
 of standardised information on radioactive airborne and liquid discharges into the environment
 from nuclear power stations and nuclear reprocessing plants.
- Environmental Permitting (England and Wales) (Exercise of Functions) (Northumberland County Council) Direction 2018 directs Northumberland County Council to exercise functions under the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016/1154) in relation to the relevant activities in Schedule 2 carried on at the premises listed in Schedule I.

8. Administration of grants to local councils, internal drainage boards and civil society

We pay grants to local councils, internal drainage boards, the Highways Agency and water companies (all of whom come under the grouping of other risk management authorities) for flood and coastal erosion risk management work. All projects must have technical and financial approval and all studies and schemes must adhere to the grant memorandum.

All grant recipients submit interim claim forms to draw down their grant. At the end of the project we request a project completion form and within two years of project close a final statement of accounts. The project completion form shows how the aims of the project were met and is reviewed and approved by the Area Flood and Coastal Risk Management Manager.

The final statement of account shows that the grant has been spent to budget to deliver the project outcomes.

Since April 2012 we have also provided grants to civil society groups and charities for work delivering the Water Framework Directive, supporting the delivery of water catchment outcomes. In 2018-19 grants were made available to each catchment partnership via the Water Environment Improvement Fund to facilitate activities towards hosting the partnerships. These host organisations were selected following an open bidding process as part of setting up the original Catchment Restoration Fund in 2013. The project manager for the fund is responsible for its assurance. We require summary reports each year to ensure that hosting and capacity building is being delivered within the financial year for which the funding is provided.

Since Summer 2017 we have administered Catchment Partnership and Natural Flood Management Grants on behalf of Defra under Section 70 of the Charities Act 2006. The Catchment Partnership Grants (CPG) fund interventions which;

- manage rural pollution
- manage pollution from towns, cities and transport
- improve modified physical habitats
- manage non-native invasive species
- improve coastal and estuarine waters.

Natural Flood Management Grants (NFMG) aim to better understand and evidence the use of NFM techniques in reducing flood risk, promoting biodiversity and improving habitats by working in partnership.

We endeavour to manage all of our programmes in accordance with guidance from Cabinet Office on Grant Standards.

9. Whistleblowing

9.1 Internal whistleblowing

Our overall arrangements for whistleblowing regarding the Environment Agency's work remain unchanged. The Director of Legal Services has responsibility for managing whistleblowing disclosures. Clear information is provided to all employees on how any disclosure can be made and what protections and support are in place for those who raise concerns. Assurance about our approach is provided to ARAC on a regular basis. Staff were reminded in April 2018 and August 2018 about our approach to whistle blowing, including how they can and should raise concerns in confidence.

All concerns raised under our policy were carefully considered and investigated. Management action was taken whenever concerns were upheld including: improved training; improved processes; and in one case a member of staff was demoted and moved.

9.2 Concerns about environmental malpractice from workers in third party employers

As part of public interest disclosure law, commonly known as 'Whistleblowing', we have an obligation to act on third party disclosures made to us concerning malpractice on environmental matters. Workers who wish to make a protected disclosure, which is in the public interest, about their employer, can choose to raise their concerns with the employer directly, or otherwise through a number of other routes including to us for environmental concerns.

In September 2018 we published our first report into external environmental whistleblowing. The report describes that between 1 April 2018 to 31 March 2019 we received 28 disclosures from people, most of whom were anonymous. Some of these disclosures may have been made by 'workers' wishing to make qualifying disclosures about their employers or other third parties. Our report describes each of the reports received and what action we took in consequence. This report is available on the GOV.UK website.

10. Data security

In 2018-2019, we reported two breaches of the data protection legislation to the Information Commissioner's Office (ICO) who regulate the legislation.

- In December 2018 SSCL sent the December 2015 payslips of staff who either worked in field services or were on long term sick or maternity leave during 2015, instead of the December 2018 payslips. They should have sent a December 2018 file to print, but selected a December 2015 file. Out of 1,476 payslips sent, there were 272 current members of staff who had moved house, and 338 former members of staff for which we do not know whether they reside at the same address or not.
- We reported to the ICO as the payslips contained confidential personal information belonging to the affected individuals. Executive Directors, the Board and senior staff were informed, with information cascaded to staff. The affected individuals were contacted by SSCL to make them aware of this, with an apology and advice provided on what steps they could take to reduce the impact of any fraud or loss (such as by contacting their bank). ICO are not taking any further action.
- We reported a matter concerning automatic number plate recognition (ANPR) data to the ICO who considered that it did not need to be reported and is not taking further action.

11. Fraud

Our Director of Legal Services, working in consultation with the Director of Finance and Deputy Director of HR, is accountable for our counter fraud activity and our approach to dealing with any suspected incidents of fraud. This activity is supported by the Environment Agency Finance team in Defra corporate services and by a Fraud Steering Group made up of managers representing a cross section of relevant expertise.

We follow the Government's counter fraud functional standards in our approach to addressing this risk, in a way that is proportionate to the actual frauds and irregularities experienced.

Many of our counter fraud controls are embedded in other processes, such as security checks for new staff, our revised code of conduct, procurement processes and schemes of delegation for both expenditure and authorising decisions.

Counter fraud activity this year has centred on increasing engagement with leadership teams, increasing awareness through development of training and ad hoc communications on specific issues.

Excluding thefts by third parties (where no employee involvement was suspected), and prosecutions for certain offences, during 2018-19 we identified 41 potentially fraudulent incidents. Of these 19 were third parties using cloned card information to misuse procurement cards. Of the remaining 22, only 7 were considered after investigation to be, on balance, fraudulent and 3 of these were committed by third parties. These 3 included 2 cyber enabled attempts to secure payment from us and 1 misuse of our brand.

Of the 4 internal cases: 2 employees were found to have over claimed overtime or standby allowances and were dismissed; 1 employee was considered to have exaggerated a motor claim against us; and several insider thefts occurred at a site on the same day. Neither we nor the police were able to identify who was responsible for these. Where the investigation did not find evidence of fraud disciplinary action was taken where appropriate. In all cases arrangements were put in place to recover any losses.

Directors' report

Board and Executive Directors

We employ three Executive Directors in addition to the Chief Executive.

A full list of Executive Directors and Board members is provided in the Remuneration and staff report. The notice period for Executive Directors is at least three months.

The Board members and Executive Directors had no company directorships or other significant interests which may conflict with their responsibilities in the financial year 2018-19.

Pensions

We are a statutory member of the Local Government Pension Scheme (LGPS). We are the administering and employing authority for the Environment Agency's Active Fund. The Environment Agency Active Fund was created in 1989 for employees of the National Rivers Authority. It now provides defined benefit pension benefits to around 26,000 people, who are current and former employees of the Environment Agency, Natural Resources Wales and Shared Services Connected Limited (SSCL). For the financial year 2018-19, the Active Fund received contributions equivalent to 18.5% from the Environment Agency and between 5.5% and 12.5% from its employees.

Every three years, the Fund undertakes a valuation in conjunction with the Scheme Actuary. Our 31 March 2016 valuation assessed the Fund's financial position with a funding level of 103% (2013: 90%). Investment performance exceeded assumptions by £260 million over the valuation period.

The Environment Agency Pension Fund (EAPF) has a strategy to integrate responsible investment into its decision making, and is a global leader. Being a responsible investor means delivering financial goals in the long-term interest of its members, recognising that environmental, social and governance issues can impact financial performance. These issues are taken into account throughout the funding and investment decision-making process.

The Government introduced regulations in 2016 which require LGPS Funds to pool investments in order to improve efficiency. Brunel Pension Partnership Ltd. (Brunel), was created and became operational from 1 April 2018. It comprises the EAPF and 9 other LGPS Funds (predominantly based in the South West) to meet this obligation.

The Board approved becoming a shareholder in Brunel in July 2017, following a rigorous assurance process. The EAPF will continue to adhere to its own Funding Strategy, and retain control of its own assets, but will aim to benefit from reduced costs from pooling investments.

The EAPF is responsible for, and provides oversight for the day to day administration of the Fund which is carried out by Capita.

The EAPF has a communication policy which identifies the Fund's key stakeholders, and how we communicate with our different categories of members. The Fund has an agreed 'digital by default' strategy for implementing a move to more electronic communication and this continues to evolve. These developments are reflected in the Fund's communication strategy. Information can be found at https://www.eapf.org.uk/

Following last years' success winning the 'Best Pension Scheme Communications' award from Pension Age magazine, the Fund has again been shortlisted for the award.

We are also the statutory administering authority for the Closed Fund. The Closed Fund provides final salary pension benefits for employees from predecessor water industry bodies. We are responsible for administering both funds in line with LGPS Regulations. The Closed Fund receives no contributions linked to Environment Agency staff. The Secretary of State for the Environment,

Food and Rural Affairs has a duty under Section 173 (3) of the Water Act 1989 to ensure the fund can meet the liabilities of pensioners who are in the scheme. We have continued to receive cash funding from Defra for the Closed Fund to pay these liabilities. The Closed Fund is reported within the Annual Report and Accounts for Defra.

Creditor payment policy and statistics

We aim to meet the level of performance for paying creditors in 'British Standard 7890: Method for achieving good payment performance in commercial transactions' and relevant HM Treasury guidance. During the year we paid 81% of invoices from suppliers within 10 days of receipt and registration, compared to 78% in the previous year. Creditor days, calculated on an average basis for the year, were nine days during 2018-19 (6 days during 2017-18).

Research and development expenditure

We run a research and development programme which covers all our scientific and technical functions in environment and business, and flood and coastal erosion risk management. The purpose of the programme is to make our business more effective and efficient, inform our advice and guidance, and develop innovative approaches to the challenges we face. We record expenditure on research in the year we spend it and we do not capitalise this expense within our statement of financial position.

Remuneration and staff report

The People and Remuneration Committee

The People and Remuneration Committee comprises four non-executive Board members and is chaired by the Environment Agency's Chair. Its name and terms of reference were updated in May 2019 and were derived from the Greenbury Code of Best Practice on Directors' Remuneration. These were adapted to the circumstances of the Environment Agency as a non-departmental public body. For the Financial year 2018/19 the Committee was called the Remuneration Committee and its terms of reference were as follows:

- 1. The Remuneration Committee is appointed by the Environment Agency Board with its delegated authority to consider any matters relating to the pay or remuneration of Environment Agency employees. The committee has regard to the Defra-Environment Agency Framework Document and other relevant requirements of Defra.
- 2. The Remuneration Committee will consider and advise the Environment Agency Board generally on matters relating to human resources.
- 3. The Remuneration Committee will:
- a. consider and approve the overall remuneration strategy of the Environment Agency from the employees' perspective including the full benefits package
- b. consider and approve periodic pay reviews for Environment Agency employees
- c. consider and approve any significant policy issues involving terms and conditions other than pay
- d. consider and approve any performance-related pay to executive directors based upon recommendations from the Chief Executive, approve the broad salary bands for executive directors and approve the specific remuneration of any executive director proposed to be appointed outside of those bands or with any special conditions
- e. set and review all aspects of the objectives and remuneration of the Chief Executive
- f. review the framework for succession planning for key posts
- g. receive an annual statement of expenses incurred by Board members
- h. advise the Board on any matters relating to pay, remuneration packages and benefits or general human resources matters in normal Board business
- 4. The Chair of the Remuneration Committee should make a report on Remuneration Committee business to the Board meeting following each Remuneration Committee meeting. The full minutes and papers of the Remuneration Committee meetings are made available to any Board member on request. The Remuneration Committee met 4 times during the financial year ended 31 March 2019. It agreed the Chief Executive's performance rating and objectives.

During the year, the committee also considered:

- · pensionable pay issues
- the annual pay award and pay remit
- EDT structure and executive directors' pay
- voluntary early release scheme payments
- the work of the committee and planned work for next year
- the Board's own expenses

Under Section one of the Environment Act 1995, Board members are appointed by the Secretary of State for the Environment, Food and Rural Affairs. The Act provides for the Environment Agency to pay its Board members such remuneration as may be determined by the appropriate minister. The level of remuneration is subject to review in the context of decisions taken by ministers from time to

time in relation to payments of this type. Non-executive Board members are not eligible for membership of the Environment Agency pension scheme or compensation for loss of office. Board members' appointments may be terminated at any time upon giving three months' notice in writing.

Remuneration of Executive Directors

We employ three executive directors in addition to the Chief Executive. Detailed below are the executive directors and their period of service (including date of appointment).

Table 1: Executive Directors' periods of service

Position	Executive director	Period of appointment
Chief Executive	Sir James Bevan KCMG	30 Nov 2015 – present
Executive Director of Operations	Dr Toby Willison	1 Apr 2015 – present
Executive Director of Environment and Business	Mr Harvey Bradshaw	26 Sept 2015 – present
Executive Director of Flood and Coastal Erosion Risk Management	Mr John Curtin	19 Sept 2015 – present

The notice period for Executive Directors is at least three months and the policy for their remuneration is the responsibility of the People and Remuneration committee.

Board members' remunerations (audited)

Table 2: The appointment and emoluments of Board members who have received emoluments in the last 2 financial years

Board member	Subcommittee member	Latest date of appointment or re-appointment	Period of appointment (years)	Latest time commitment (days)	Remuneration in 2018-19 (£)	Remuneration in 2017-18 (£)
Emma Howard Boyd (Chair) (i)	PC, PCISC, RC	19 Sept 2019	3	3 per week	100,000	100,000
Richard Macdonald (Deputy Chair)	ARAC, RC, FCRM	1 Jun 2016	4	5 per month	25,201	25,201
Maria Adebowale-Schwarte (ii)	PC, RC, EB	1 July 2019	3	4 per month	16,800	20,302
Peter Ainsworth (iii)	FCRM, EB	1 Sept 2015	3	4 per month	5,600	16,802
Karen Burrows (iv)	ARAC, PC, RC, EB	1 Sept 2015	3	7 per month	12,250	29,400
Clive Elphick (v)	ARAC, PC, RC, EB	1 Aug 2014	4	6 per month	-	8,401
Lynne Frostick	FCRM	16 Mar 2018	3	6 per month	25,200	25,056
Robert Gould (vi)	ARAC, FCRM, PC, PCISC	1 Feb 2018	3	5 per month	18,211	2,800
John Lelliott	ARAC, FCRM	1 Feb 2018	3	4 per month	16,800	2,800
Joanne Segars (vii)	ARAC, PC, PCISC, RC, FCRM	1 Mar 2017	3	5 per month	14,001	21,002
Gill Weeks	ARAC, EB	8 Sept 2017	3	5 per month	21,002	24,500
John Varley	EB	1 Oct 2015	4	3 per month	12,597	12,597
Judith Batchelar (viii)	ARAC, EB	1 April 2018	3	4 per month	16,800	n/a
Caroline Mason (ix)	PC, EB	1 April 2018	3	4 per month	16,800	n/a
Total					301,262	288,861

Details of the attendance of Board members are provided in Appendix E. Non-executive Board members have no entitlement to performance-related pay. The above figures are total emoluments received and are not shown on a full time equivalent or full year basis.

ARAC - Member of Audit and Risk Assurance Committee at 31 March 2019

RC – Member of Remuneration Committee at 31 March 2019

- PC Member of Pensions Committee at 31 March 2019
- PCISC Member of Pensions Investment Sub Committee
- FCRM Member of Flood and Coastal Risk Management Committee at 31 March 2019
- EB Member of Environment and Business Committee 31 March 2019

Notes:

- i. Emma Howard Boyd was re-appointed for a second term as Chair effective from 19 September 2019.
- ii. Maria Adebowale-Schwarte was re-appointed to the Board effective from 1 July 2019 until 30 June 2022.
- iii. Peter Ainsworth's term ended in August 2018. His full year equivalent pay was £16,802.
- iv. Karen Burrow's term ended in August 2018. Her full year equivalent pay was £29,400.
- v. Clive Elphick's term ended in August 2017. His full year equivalent pay was £25,200.
- vi. Robert Gould's time commitment increased from 4 days to 5 days per month effective from 3 December 2018 when he assumed the role of Pensions Committee Chair.
- vii. Joanne Segars resigned from the Board on 9 November 2018.
- viii. Judith Batchelar was appointed to the Board from 1 April 2018 until 31 March 2021.
- ix. Caroline Mason was appointed to the Board from 1 April 2018 until 31 March 2021.

Executive Directors' emoluments (audited)

Table 3: Total emoluments and benefits in kind of Executive Directors in the last 2 financial years

Executive director	Emolumen (£000 band		Benefits in (to nearest		Pension ber (to the neare		Total (£000 band	ded range)
	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18
Sir James Bevan (i)	205-210	200-205	-	-	7,241	44,541	210-215	245-250
Dr Toby Willison (ii)	155-160	160-165	1,704	4,100	32,791	113,416	185-190	280-285
Harvey Bradshaw (iii)	155-160	135-140	-	-	130,895	9,582	285-290	145-150
John Curtin	140-145	130-135	-	1,400	40,915	18,976	180-185	150-155

Total emoluments include gross salaries and performance related pay, the details of which are included in the notes below.

- i. Sir James Bevan became Chief Executive on 30 November 2015. Sir James Bevan is an employee of the Foreign and Commonwealth Office (FCO) who is seconded to the Environment Agency. The amounts shown above are the amounts reimbursed to the FCO, exclusive of VAT which is recoverable by the Environment Agency. The pension benefits disclosed above represent the contributions the Environment Agency reimburses to the FCO in respect of Sir James Bevan's pension costs in the Principal Civil Service Pension Scheme. All other Executive Directors were members of the Environment Agency Pension Fund.
- ii. Toby Willison was awarded Performance Related Pay (PRP) of between £15,000 and £20,000 for 2016-17 which was paid in October 2017. The pension benefit of £113,416 reported in table 3 is calculated using standard pension disclosure assumptions with the principal assumption that an increase in pension benefit is approximately 20 times an increase in accrued pension.
- iii. Harvey Bradshaw was awarded Performance Related Pay (PRP) of between £15,000 and £20,000 for 2017-18 which was paid in October 2018.

Table 4: Pension benefits of Executive Directors during the last 2 financial years (audited)

Executive director	Accrued pension at 31 March 2018 (£5,000 range)	Increase in accrued pension during year (£2,500 range)	sum at 31 March 2019	Increase in Iump sum during year (£2,500 range)	CETV at 31 March 2018 (£000s)	CETV at 31 March 2019 (£000s)	Real increase in CETV (£000s)
Sir James Bevan (i)	240-245	0-2.5	250-255	2.5-5	1,823	2,002	8
Dr Toby Willison	105-110	0-2.5	110-115	0-2.5	1,045	1,233	21
Mr Harvey Bradshaw	115-120	5-7.5	125-130	10-12.5	1,120	1,407	117
Mr John Curtin	80-85	0-2.5	85-90	0-2.5	757	918	27

The Environment Agency remunerates its employees in line with standard public sector pay and pension policies. The accrued pension at 31 March 2019 represents the annual pension that individuals would be entitled to at their normal retirement date in the event they left employment with the Environment Agency on 31 March 2019.

CETV - cash equivalent transfer value. This is the amount an individual's pension would represent if transferred to a private pension scheme. The real increase in CETV reflects the increase funded by the employer. It does not include the increase in accrued pension due to inflation or contributions paid by the employee (including the value of any benefits transferred from another pension scheme or arrangement).

Sir James Bevan is on secondment from the FCO since 30 November 2015 and therefore is a member of the Principal Civil Service Pension Scheme.

Staff report

This report provides information on the composition of our workforce. Staff costs are disclosed in note 3 to the financial statements.

Table 5: Average number of full time equivalent staff employed during the year (audited)

	2018-19			2017-18		
	Permanent	Temporary	Total	Permanent	Temporary	Total
Directly employed	9,372	321	9,693	9,560	295	9,855
Contractors	-	536	536	-	659	659
Total	9,372	857	10,229	9,560	954	10,514

The number of staff employed on capital projects was 1,134 (1,004 in 2017-18).

In March 2019, the Environment Agency employed 84 executive managers (equivalent to senior civil servant grades). The breakdown of these by level is shown in table 6.

Table 6: Executive manager breakdown on 31 March 2019

	Headcount
Chief Executive	1
Executive Directors	3
Directors	18
Deputy directors	62
Total	84

All of the above are Environment Agency employees, with the exception of the Chief Executive, who is on a five year secondment from the Foreign and Commonwealth Office. Four are on secondment to other organisations, mainly Defra. We follow the Defra group Equality, Diversity and Inclusion (EDI) Strategy 2017-2020. Following consultation with our employees the Board approved five equality objectives for 2017-2020 as our response to the Equality Act's Public Sector Equality Duty.

Gender

We monitor the gender split of our workforce and have included the current numbers in table 7. This year we have again seen an improvement in the balance of men and women at each grade below executive manager level. The proportion of executive managers who are women is 35%.

Table 7: Gender split on 31 March 2019

	Male Headcount	Female Headcount
Chief Executive, Executive Directors, Directors and Deputy Directors	55	29
All other staff	5,970	4,376
Total	6,025	4,405

The gender pay gap is the difference in the average hourly wage of all men and women across a workforce. Our gender pay gap is 3% and much lower than the overall UK gender pay gap. This is because we have a higher proportion of men than women in both higher paid and lower paid roles.

Disability

Our Executive Directors Team have approved the EDI Delivery Plan 2018-2020 which incorporates the Disability Action Plan. We continue to nurture, encourage and support our mutual support employee networks. They act as our "critical friends" supporting our plans to remove all potential barriers which might prevent employees achieving their full potential in our workplace. We have separate networks for those dealing with cancer, chronic pain, dyslexia, hearing loss, fatigue, inflammatory bowel disease, mental health, physical mobility, and visual impairment. We also have a discussion forum for autism, and aim to launch a network for autistic staff in 2018.

The feedback of disabled colleagues remains a key driver to the Disability Action Plan. The plan addresses our continuing commitment where we champion the career development, career progression and retention of our disabled employees and we carry out reviews to make sure we do not discriminate against them. In 2017 we introduced our first ever centralised workplace adjustments for employees with a disability or impairment. It has been very well received, as has been our first ever disability leave policy. These complement our employee disability passport, a confidential document where our employees share their relevant personal sensitive information with a new line manager to enable the manager to consider necessary adjustments. In addition, our guaranteed interview scheme means that if an external or internal candidate declares that they have a disability or impairment and they meet the minimum criteria for the job, they will be offered an interview.

Sickness absence data

We monitor staff sickness absences and have policies in place to minimise them. An average of 6.2 days per full time equivalent employee was lost to sickness absence in 2018-19 (2017-18 – 5.9 days)

Employment of consultants and contractors

The nature of our work means we require the expertise of temporary workers as well as those we employ permanently. Temporary workers are short to medium term employees of the Environment Agency, contractors are staff employed by a small number of labour agencies used by the Environment Agency under national frameworks. Consultants are other individuals not on our payroll, Table 8 shows how much we have spent on temporary workers, contractors and consultants over the past two years (Table 5 shows the numbers employed under the category "contractors").

Table 8: Expenditure on temporary workforce

	2018-19	2017-18	
	£ million	£ million	
Consultancy	15.1	17.0	
Temporary workers and contractors	7.5	15.3	
Total	22.6	32.3	

Tax arrangements of public sector appointees

We provide information about appointments of consultants or contractors who are paid by invoice rather than being on the payroll, where these that last longer than six months and where the individuals earn more than £245 per day. We only use these arrangements where we cannot avoid them and minimise their use. We include contractual clauses in the appointment documents to enable us to receive assurance that the individual or their employer is managing their tax and national insurance affairs appropriately.

New off-payroll working rules for public sector organisations called "IR35" were put in place from April 2017 to make sure that where an individual would have been an employee if they were providing their services directly, they pay broadly the same tax as an employee, with the requirement for the employer to deduct tax at source.

Table 9: Off-payroll appointments at 31 March 2019, for more than £245 per day and that last longer than 6 months

Number of existing engagements as of 31 March that have existed for:	Number
Less than one year	4
Between one and two years	-
Between two and three years	1
Total	5

During this financial year, we made two new off-payroll appointments lasting more than six months. These included contractual clauses giving us the right to request assurance of compliance with income tax and national insurance obligations. For both of these we have requested and received such assurance, assessed it and found the arrangements were compliant with IR35 rules.

There were sixteen Board members or senior officials with significant financial responsibility over the organisation during the financial year 2018-19. We did not pay any of them via off-payroll arrangements, other than the Chief Executive Officer, who is paid through the civil service payroll within the FCO, as described in the Remuneration report.

Reporting of compensation schemes (audited)

There may be occasions when external or internal changes have an impact on our staffing requirements. In these situations, we will use our Voluntary Early Release Scheme to avoid compulsory redundancies wherever possible. Our scheme supports business needs and fits in with our overall human resources strategy.

Redundancy and other departure costs are paid in accordance with our compulsory redundancy and voluntary early release schemes. Both schemes are based on the statutory redundancy scheme and take account of the Local Government (Early Termination of Employment) (Discretionary Compensation) (England and Wales) Regulations 2006. Exit costs are accounted for in full when official notice has been served. A summary of exit costs in the past two financial years is shown in tables ten and eleven.

Table 10: Exit packages for the financial year 2018-19 (audited)

Category	Compulsory redundancy	Other departures*	Total	Compulsory redundancy	Other departures	Total
	Number	Number	Number	£ million	£ million	£ million
Under £10,000	-	1	1	-	0.0	0.0
£10,000 - £25,000	-	2	2	-	0.0	0.0
£25,001 - £50,000	-	1	1	-	0.0	0.0
£50,001 - £100,000	-	3	3	-	0.3	0.3
Total	-	7	7	-	0.3	0.3

^{*} Other departure costs include those on voluntary early release schemes and early, flexible and ill health retirements.

Table 11: Exit packages for the financial year 2017-18 (audited)

Category	Compulsory redundancy	Other departures*	Total	Compulsory redundancy	Other departures	Total
	Number	Number	Number	£ million	£ million	£million
Under £10,000	-	-	-	-	-	-
£10,000 - £25,000	-	5	5	-	0.1	0.1
£25,001 - £50,000	-	4	4	-	0.2	0.2
£50,001 - £100,000	-	6	6	-	0.4	0.4
Total	-	15	15	-	0.7	0.7

^{*} Other departure costs include those on voluntary early release schemes and early, flexible and ill health retirements.

One of the departures reported in 2017-18 was for Mark McLaughlin, the former Executive Director of Finance. He was an Executive Director of the Environment Agency from 22 June 2009 to 30 September 2015 when he was seconded to Defra as its Chief Finance Officer. Following the end of his secondment on 30 September 2017, he left the Environment Agency through a Voluntary Early Release Scheme. He received compensation as part of the early release scheme of between £90,000 - £95,000.

Where we have agreed to a colleague taking early retirement, any additional costs have been paid by us rather than the Environment Agency Pension Fund. Ill-health retirement costs are covered by the pension scheme and are not included in the table. Redundancy and other departure costs for Executive Directors are also included in the Remuneration and staff report.

Pay multiples (audited)

In line with the Hutton Review of Fair Pay, the Environment Agency and similar bodies are required to disclose the relationship between the remuneration of the highest paid director in their organisation and the median remuneration of the organisation's workforce.

The banded remuneration of the highest paid executive director, as disclosed in the Remuneration and staff report, for the financial year 2018-19 was £205,000-210,000 (financial year 2017-18, £200,000 -205,000). This was 6 times (financial year 2017-18, six times) the median remuneration

of the workforce, which was £34,742 (financial year 2017-18, £32,609). The range of banded remuneration for employees was £10,000 to £15,000 up to £205,000 - £210,000 (financial year 2017-18, £10,000 to £15,000 up to £200,000 to £205,000). Total remuneration includes salary, nonconsolidated performance-related pay and benefits-in-kind. It does not include severance payments, employer pension contributions and the cash equivalent transfer value of pensions.

Relevant union officials (not subject to audit)

The Trade Union (Facility Time Publication Requirements) Regulations 2017, a statutory instrument under the Trade Union and Labour Relations (Consolidation) Act 1992, requires reporting of certain information regarding employees of public sector organisations who conduct activities as members of trade unions during their employment.

The number of employees who were relevant union officials during 2018-19 was 187 (2017-18, 140) with full-time equivalent employee numbers of 177 (2017-18, 134).

Table 12: Percentage of pay bill spent on facility time

Measures	Cost (£millions)			
	2018-19	2017-18		
Total facility time by union officials	0.3	0.3		
Total all staff	337	340.7		
Percentage on facility time	0.1%	0.1%		

Table 13: Percentage of staff time spent on facility time

Measures	Time (in hours)		
	2018-19	2017-18	
Total facility time by union officials	11,923	9,994	
Total working hours by union officials	341,895	305,353	
Percentage on facility time	3.5%	3.3%	

Table 14 - Percentage of individual staff time spent on trade union activities

Percentage of time	Employee Headcount		
	2018-19	2017-18	
0%-1%	121	58	
1%-50%	66	82	
Total	187	140	

Parliamentary accountability and audit report

Main activities of the Environment Agency Business Units

Environment and Business charges

The main chargeable activities of our Environment and Business operating units (water, land and biodiversity and regulation of industry) are detailed below.

Water, land and biodiversity:

- Abstraction charges charging businesses for abstracting water from rivers or groundwater. The income reported also includes other elements of water resources income.
- Environmental Permitting Regulations (EPR) water quality charging businesses for permits to discharge into the water environment.
- Fishing licences charging individuals for licences to fish.

Regulation of industry:

- EPR installations permitting to control and minimise pollution from industrial activities.
- EPR waste permitting for waste management and exemptions.
- Hazardous waste licensing for producing, transporting or receiving hazardous waste.
- Emissions trading, Carbon Reduction Commitment (CRC) Energy Efficiency Scheme and Climate Change Agreements Scheme regulation of businesses under schemes including the EU Emissions Trading System and CRC Energy Efficiency Scheme.
- Nuclear regulation regulation of nuclear sites (radioactive substances 1 and 2), non-nuclear sites (radioactive substances 3 and 4) and nuclear new build sites.
- Other environmental protection charges licensing for registration of waste carriers and brokers, trans-frontier shipments, producer responsibility licensing, end-of-life vehicles, polychlorinated biphenyls and regulation of businesses under such schemes as control of major accident hazards (COMAH).
- Navigation licences charging individuals for boat licences.

Environment and Business grant-in-aid

In addition we receive grant-in-aid from Defra which supports the following Environment and Business activities:

- strategic direction for delivery and support to Defra
- setting our direction on environmental protection to help create a better place for people and wildlife
- provision of technical leadership
- advice to government and other organisations in England that are involved in environmental protection
- monitoring, including water quality
- · strategic environment planning, including river basin and catchment restoration plans
- investigations and improvement under the Water Framework Directive
- · enforcement and environmental crime work including waste crime
- incident management
- navigation and fisheries work not covered by charges
- work with local partners, communities and government
- town and country planning advice
- administration of energy efficiency/carbon reduction schemes, including the Energy Savings Opportunities Scheme (ESOS)

Flood and Coastal Risk Management

The main activities of our Flood and Coastal Erosion Risk Management operating unit are detailed below:

- investment strategy
- incident management and resilience, including flood warnings
- asset management
- · digital and skills

Analysis of fees and charges

Table 15 relates to income from fees and charges for the Environment and Business operating unit and is reported in line with the accounting policy for deferred and accrued income within note 1.9 of the financial statements. Income billed differs from income reported in note 6 due to the accounting policy on accrued and deferred income disclosed in note 1.9. The cumulative surpluses and deficits are reported in notes 10 and 12 of the financial statements.

Expenditure funded by grant-in-aid has been excluded from the table below, except for fisheries and navigation where the deficit after charges is funded by grant-in-aid. The table does not include the effect of IAS 19 pension adjustments as these are not passed on to charge payers. The financial objective for the above Environment and Business charging schemes is full cost recovery taking one year with another, based on all costs including current cost depreciation and a rate of return on relevant assets.

Table 15: fees and charges income (audited)

Type of charge	Expenditure (£ million)	Income billed (£ million)	Deficit or (surplus) (£ million)
Abstraction charges	126.6	(123.3)	3.3
Navigation licences	9.9	(9.0)	0.9
Fishing licences	21.7	(21.9)	(0.2)
EPR Water Quality	70.3	(70.3)	-
EPR Installations	31.9	(32.5)	(0.6)
EPR Waste	32.1	(32.1)	-
Hazardous waste	15.3	(15.5)	(0.2)
Emissions Trading and Carbon Reduction Commitment	6.7	(6.9)	(0.2)
Nuclear regulation	15.6	(16.0)	(0.4)
Other environmental protection charges	16.9	(15.8)	1.1
Total 2018-19	347.0	(343.3)	3.7
Total 2017-18	323.9	(319.9)	4.0

Losses and special payments (audited)

HM Treasury's 'Managing Public Money' rules require disclosure of losses and special payments by category, type and value where they exceed £300,000 in total, and for any individual items above £300,000.

Table 16: Losses and special payments by category

	31 March 2019		31 March	2018
Category / type	Number	£ millions	Number	£ millions
Write-off of sundry debts	240	2.0	419	9.4
Loss of assets	120	0.1	132	0.1
Special Payments	3	2.0	10	1.7
Other (cash losses, fruitless payments, unenforceable claims, special payments and gifts)	159	0.5	227	1.1
Total	522	4.6	788	12.3

Losses are estimated at fair value and include costs incurred in previous years. We pursue all debts and refer unpaid invoices to a debt collection agency after a certain period. Some debts become irrecoverable and need to be written off such as those due from businesses and individuals which have become insolvent.

Losses and special payments individually over £300,000

There were no losses and there was one special payment in excess of £300,000. (In 2017-18 there were 3 losses and one special payment disclosed). The special payment of £2m was to settle an employer's liability claim, following external legal advice, in order to reduce the greater expected cost of reaching settlement in court.

Contingent Liabilities (audited)

There is one case currently in a judicial process relating to compensating events on flood alleviation contracts where payment to settle the dispute is probable. There are no other contingent liabilities (remote or otherwise) that require disclosure in the Annual Report and Accounts.

Sir James Bevan, Chief Executive

D Revan

Date - 10 July 2019

The Certificate and Report of the Comptroller and Auditor General to the House of Commons

Opinion on financial statements

I certify that I have audited the financial statements of the Environment Agency for the year ended 31 March 2019 under the Government Resources and Accounts Act 2000. The financial statements comprise: the Statements of Comprehensive Net Expenditure, Financial Position, Cash Flows, Changes in Taxpayers' Equity; and the related notes, including the significant accounting policies. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Accountability Report that is described in that report as having been audited.

In my opinion:

- the financial statements give a true and fair view of the state of the Environment Agency's affairs as at 31 March 2019 and of the net expenditure for the year then ended; and
- the financial statements have been properly prepared in accordance with the Government Resources and Accounts Act 2000 and HM Treasury directions issued thereunder.

Opinion on regularity

In my opinion, in all material respects the income and expenditure recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

Basis of opinions

I conducted my audit in accordance with International Standards on Auditing (ISAs) (UK) and Practice Note 10 'Audit of Financial Statements of Public Sector Entities in the United Kingdom'. My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of my certificate. Those standards require me and my staff to comply with the Financial Reporting Council's Revised Ethical Standard 2016. I am independent of the Environment Agency in accordance with the ethical requirements that are relevant to my audit and the financial statements in the UK. My staff and I have fulfilled our other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Responsibilities of the Accounting Officer for the financial statements

As explained more fully in the Statement of Accounting Officer's Responsibilities, the Accounting Officer is responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

Auditor's responsibilities for the audit of the financial statements

My responsibility is to audit, certify and report on the financial statements in accordance with the Government Resources and Accounts Act 2000.

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. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered

material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs (UK), I exercise professional judgment and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit
 procedures that are appropriate in the circumstances, but not for the purpose of expressing
 an opinion on the effectiveness of the Environment Agency's internal control.
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Environment Agency's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern.
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

In addition, I am required to obtain evidence sufficient to give reasonable assurance that the income and expenditure reported in the financial statements have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

Other Information

The Accounting Officer is responsible for the other information. The other information comprises information included in the annual report, other than the parts of the Accountability Report described in that report as having been audited, the financial statements and my auditor's report thereon. My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon. In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have nothing to report in this regard.

Opinion on other matters

In my opinion:

- the parts of the Accountability Report to be audited have been properly prepared in accordance with Secretary of State and HM Treasury directions made under the Government Resources and Accounts Act 2000:
- in the light of the knowledge and understanding of the Environment Agency and its environment obtained in the course of the audit, I have not identified any material misstatements in the Performance Report or the Accountability Report; and
- the information given in the Performance Report and Accountability Report for the financial year for which the financial statements are prepared is consistent with the financial statements.

Matters on which I report by exception

I have nothing to report in respect of the following matters which I report to you if, in my opinion:

- adequate accounting records have not been kept or returns adequate for my audit have not been received from branches not visited by my staff; or
- the financial statements and the parts of the Accountability Report to be audited are not in agreement with the accounting records and returns; or
- I have not received all of the information and explanations I require for my audit; or
- the Governance Statement does not reflect compliance with HM Treasury's guidance

Report

I have no observations to make on these financial statements.

Gareth Davies

Date 12 July 2019

Comptroller and Auditor General

National Audit Office 157-197 Buckingham Palace Road Victoria London SW1W 9SP

Financial statements

Statement of Comprehensive net Expenditure

For the year ended 31 March 2019		2018-19	2017-18
	Note	£ million	£ million
Expenditure			
Staff costs	3	491.4	483.1
Capital works expensed in year	4	328.3	298.1
Depreciation and amortisation	7,8	109.3	106.7
Other expenditure	5	465.9	427.3
		1,394.9	1,315.2
Income			
Income from contracts with customers	6	(394.2)	(362.7)
Other operating income	6	(25.6)	(28.3)
Capital grants and contributions	6	(22.4)	(27.0)
		(442.2)	(418.0)
Net expenditure	2	952.7	897.2
Gain on sale of assets		(1.5)	(1.5)
Interest receivable		(0.3)	-
Financing on pension scheme assets and liabilities	15.3	11.7	11.5
Net expenditure after interest		962.6	907.2
Other comprehensive expenditure			
Revaluation of property, plant and equipment	7,9	(55.3)	(117.1)
Revaluation of intangible assets	8,9	(0.5)	(1.9)
Actuarial loss/ (gain) on pension scheme assets and obligations	15.3	151.6	(89.8)
Total Comprehensive Net Expenditure for the period		1,058.4	698.4

All of the Environment Agency's income and expenditure for the year was derived from continuing activities.

The notes on pages 66 to 97 form part of these accounts.

Statement of Financial Position

As at 31 March 2019		31 March 2019		31 March 2018	
	Note	£ million	£ million	£ million	£ million
Non-current assets					
Property, plant and equipment	7	3,090.1		3,031.2	
Intangible assets	8	120.5		118.1	
Total non-current assets			3,210.6		3,149.3
Current assets					
Assets classified as held for resale	7	17.9		10.3	
Trade, contract and other receivables	10	95.7		83.2	
Cash and cash equivalents	11	108.5		114.1	
Total current assets			222.1		207.6
Total assets			3,432.7		3,356.9
Current liabilities					
Trade, other payables and contract liabilities	12	(365.1)		(335.3)	
Total current liabilities			(365.1)		(335.3)
Total assets less current liabilities			3,067.6		3,021.6
Non-current liabilities					
Deferred grants and contributions		-		(0.2)	
Provisions		(4.9)		(5.3)	
Reservoir operating agreements	16.1	(141.6)		(141.6)	
Pension liabilities	15.3	(655.4)		(400.3)	
Trade, contract, other payables and liabilities	12	(1.2)		(1.3)	
Total non-current liabilities			(803.1)		(548.7)
Assets less liabilities			2,264.5		2,472.9
Taxpayers' equity					
Revaluation reserve		1,908.9		1,901.5	
Pensions reserve		(655.4)		(400.3)	
General Reserve		1,011.0		971.7	
Total Taxpayers' equity			2,264.5		2,472.9

The notes on pages 66 to 97 form part of these accounts. The financial statements on pages 62 to 65 were approved by the Board on 19 June 2018 and signed on its behalf by:



Sir James Bevan, Accounting Officer
Date - 10 July 2019

Statement of cash flows

For the year ended 31 March 2019		2018-19		2017-18	
	Note	£ million	£ million	£ million	£ million
Cash flows from operating activities					
Net expenditure after interest		(962.6)		(907.2)	
Depreciation and amortisation	7,8	109.3		106.7	
Impairment of non-current assets	9	6.7		6.0	
Amortisation of grants received		(0.2)		-	
Gain on sale of assets		(1.5)		(1.5)	
Movement in trade, contract and other receivables	10	(12.5)		16.5	
Movement in trade, other payables and contract liabilities	12	29.7		(4.4)	
Movement in capital payables		4.1		(1.9)	
Movement in provisions		(0.4)		(1.9)	
Pension reserve transfer	13.1	103.5		84.4	
Net cash flow from operating activities			(723.9)		(703.3)
Cash flows from investing activities Purchase of property, plant and equipment	7	(111.5)		(115.6)	
Purchase of intangible assets	8	(19.1)		(12.8)	
Movement in capital payables	12	(4.1)		1.9	
Proceeds of disposal of property, plant and equipment		3.0		4.9	
Net cash from investing activities			(131.7)		(121.6)
Cash flows from financing activities					
Grant from sponsoring body	17	850.0		850.0	
Net cash from financing activities			850.0		850.0
Not movement in each and each	11				
Net movement in cash and cash equivalents in the period	11		(5.6)		25.1
Cash and cash equivalents at the beginning of the period	11		114.1		89.0
Cash and cash equivalents at the end of the period	11		108.5		114.1

The notes on pages 66 to 97 form part of these accounts. Prior year amounts have been reclassified to include movement in capital payables.

Statement of Changes in Taxpayer's Equity

For the period ended 31 March 2019		Revaluation reserve	General reserve	Pension reserve	Total reserves
Changes in taxpayers' equity	Note	£ million	£ million	£ million	£ million
Balance at 1 April 2017		1,833.4	893.6	(405.7)	2,321.3
Net gain on revaluation of property, plant and equipment	7,9	117.1	-	-	117.1
Net gain on revaluation of intangible assets	8,9	1.9	-	-	1.9
Actuarial gain on pension scheme assets and obligations	15.3	-	-	89.8	89.8
Transfers between reserves	13.2	(50.9)	135.3	(84.4)	-
Retained deficit		-	(907.2)	-	(907.2)
Grant from Defra	17	-	850.0	-	850.0
Balance at 1 April 2018		1,901.5	971.7	(400.3)	2,472.9
Net gain on revaluation of property, plant and equipment	7,9	55.3	-	-	55.3
Net gain on revaluation of intangible assets	8,9	0.5	-	-	0.5
Actuarial gain on pension scheme assets and obligations	15.3	-	-	(151.6)	(151.6)
Transfers between reserves	13.1	(48.4)	151.9	(103.5)	-
Retained deficit		-	(962.6)	-	(962.6)
Grant from Defra	17	-	850.0	-	850.0
Balance at 31 March 2019		1,908.9	1,011.0	(655.4)	2,264.5

The notes on pages 66 to 97 form part of these accounts

Revaluation reserve - reflects the cumulative balance of revaluation and indexation of non-current assets.

General reserve - reflects the cumulative position of net expenditure and funding from sponsor bodies of the Environment Agency, together with the historical cost of the non-current assets transferred on the creation of the Environment Agency.

Pension reserve - reflects the cumulative position of the net assets or liabilities of the pension scheme.

Notes to the financial statements

1.1 Statement of accounting policies

The financial statements have been prepared in accordance with the 2018-19 government financial reporting manual (FReM) issued by HM Treasury and are in accordance with the accounts direction issued by the Secretary of State for Environment, Food and Rural Affairs and HM Treasury under Section 45 of the Environment Act 1995.

The accounting policies in the FReM adapt and interpret International Financial Reporting Standards (IFRS) for the public sector context. They comply with the guidelines issued by the International Financial Reporting Interpretations Committee.

Where the FReM allows a choice of accounting policy, these accounts follow the policy which is most appropriate to give a true and fair view for the Environment Agency. The policies adopted by the Environment Agency are described in this statement of accounting policies. The Environment Agency has applied these judgements consistently in dealing with items that are considered material in relation to the accounts.

In the preparation of financial statements the Environment Agency is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosures of contingent assets and liabilities, and the reported amount of income and expenditure. All estimates are based on knowledge of current facts and circumstances, assumptions concerning past events, and forecasts of future events.

Significant judgements

The following areas represent significant judgments that the Environment Agency has made in applying the accounting policies:

- Pension liabilities (reported in note 15). Independent and qualified actuaries assess the specific factors that influence the pension fund position, such as life expectancy and age of scheme members, prevailing interest and inflation rates, and projected returns on invested funds.
- The useful economic lives of assets that form the basis of periods over which property, plant and equipment is depreciated (reported in notes 1.5 and 7) and intangible assets are amortised (reported in notes 1.6 and 8).
- The impairment of property, plant and equipment, and intangible assets (reported in notes 5 and 9) and the categorisation of expenditure as capital works expensed in year, and tangible or intangible assets (reported in notes 4, 7 and 8).
- Revenue recognition regarding satisfaction of performance obligations on fees and charges per IFRS15 (see Note 1.3). Within receivables and payables there are accrued and deferred income balances for fees and charges where there is a surplus or deficit. Charging schemes are required to break even over a reasonable period of time and judgment is required in assessing the factors behind whether the surplus or deficit will result in a break even position over this reasonable period (reported in notes 1.9,10 and 12).
- The classification of expenditure between property plant and equipment and capital works expensed in year. (reported in notes 1.4 and 4)
- The calculation of expected bad debts by income stream per IFRS 9 business model assessment and calculation of Expected Credit Losses (see Note 16).

Please note that the actual future income, expenditure, assets and liabilities may differ from the estimates included in these financial statements.

1.2. Accounting convention

These accounts have been prepared on an accruals basis, under the historical cost convention, modified to account for the revaluation of property, plant and equipment and intangible assets. The accruals basis of accounting means reporting income and expenditure when it is incurred rather than when it is received or paid. These financial statements are based on the going concern principle.

1.3. Income

Revenue is measured based on the consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties. Income from Government Grants (accounted for under IAS 20: Accounting for Government Grants) and operating lease rental income are recorded as other operating income.

The Environment Agency recognises revenue from its fees and charges in accordance with the five stages set out in IFRS 15 Revenue from contracts with customers. Revenue is recognised when (or as) the Environment Agency satisfies a performance obligation.

Charges income falls into two main categories: an application for a licence or permit for which revenue is recognised at the time of the application, and the subsistence charge associated with licences and permits, which give the customer legal entitlement to carry out their operation for a period of time under the Environment Agency's regulation. Such subsistence income is recognised when billed at the point the new permit period commences.

For retail transactions and sale of goods, the customer simultaneously receives and consumes the benefits provided, and the revenue is recognised at a point in time.

In the comparative period, revenue was measured at the fair value of the consideration received or receivable, and revenue from the sale of goods and services was recognised when the significant risks and rewards of ownership had been transferred to the customer.

Income reported in the accounts represents revenue received and receivable during the accounting period for the permitted functions of the Environment Agency.

The income from charges for regulating businesses to monitor and control their impact on the environment is derived from a combination of applications for licences and ongoing fees and charges. Income also arises from issuing licences for activities such as fishing or navigation on designated rivers. Income is reported before an estimate is made of expected future losses in the form of bad debts by income stream, as required by IFRS 9.

Grant-in-aid

The Environment Agency receives grants that are classified as either 'revenue' (to fund operating expenditure) or 'capital' (to fund expenditure on items providing longer term benefit). These grants are treated as financing received from its controlling party, which is Defra. The receipts are recorded as a financing transaction and are credited directly to the general reserve in the statement of financial position and not through the statement of comprehensive net expenditure.

Grants and contributions received

The Environment Agency treats other grants that relate to specific capital expenditure, and that have conditions attached to the asset, as deferred grants and contributions. These are credited to the statement of comprehensive net expenditure over the period where the condition relating to the asset remains effective, but no longer than the asset's useful economic life. The specific conditions are:

- If the grant is provided on condition of construction of an asset, the grant is only repayable if the
 asset is not constructed; therefore the income is recognised over the period of construction of
 the asset.
- If the grant is provided on condition of construction of the asset and also imposes a requirement on the condition of the asset over its useful life, the income is recognised over the useful economic life of the asset. The method of apportioning the amortisation each year depends on the contract terms associated with each grant receipt.

Where there are no grant conditions imposed on the asset, the grant is recognised as income within the statement of comprehensive net expenditure at the date of receipt.

Grant expenditure

The Environment Agency has responsibility for administering and issuing grants to local councils and internal drainage boards (IDBs) for flood and coastal erosion risk management capital schemes.

The Environment Agency also has responsibility to administer and issue grants to local councils for contaminated land remediation schemes. The Environment Agency receives the funding from Defra as grant-in-aid, and then allocates it to appropriate projects during the year. The grants are included in the financial statements when a liability becomes certain.

1.4. Capital works expensed in year

When the Environment Agency undertakes works which are capital in nature but it does not retain the related risks and rewards, cannot reliably estimate the useful life of the asset being constructed or is restoration of an asset to target or useable condition this expenditure is reported as capital works expensed in year. This includes:

- flood and coastal risk management assets built on land which the Environment Agency does not own but where it has permissive powers to maintain the defence
- assets where it is not possible to check for impairment, for example beach replenishment, so it is more prudent to write off the asset in year

1.5. Property, plant and equipment

Administrative freehold land and buildings are reported at a 'fair value' which is assessed on an open market value for existing use, rather than simply market value where a market exists. Land and buildings are subject to independent professional revaluation in accordance with the Royal Institute of Chartered Surveyors valuation standards every 5 years.

The Environment Agency uses operational assets to deliver its environmental outcomes. These assets are specific in nature, location or function. Typically these assets include flood risk management works, such as barriers, pumping stations and flood risk management landholdings, and water resource assets, such as telemetry stations and boreholes. It is not possible to revalue these assets effectively using market comparatives or professional valuations. The Environment Agency accounts for these assets in the statement of financial position at depreciated replacement cost. An appropriate index is used to increase the value of these assets each year.

On an annual basis the Environment Agency assesses the value of other tangible non-current assets against fair value.

The Environment Agency records assets under construction at cost and does not revalue them.

Where the Environment Agency incurs subsequent expenditure on previously commissioned property, plant and equipment, it is capitalised if it meets the criteria for capitalisation. The criteria are met where it is probable that the Environment Agency will receive continuing economic benefit from the asset and that the cost of the expenditure can be reliably measured.

All land is capitalised regardless of value. Other categories of property, plant and equipment are capitalised if the asset has a cost of £5,000 or more.

The Environment Agency calculates depreciation to write off the value of a tangible non-current asset on a straight line basis over the expected useful economic life of the asset concerned. Depreciation is not charged in the month of disposal or in the month of purchase.

Freehold land is not depreciated, unless it forms an essential element of an operational asset and it significantly changes its nature. There are only a small number of land assets that fall into this category and they mainly relate to habitats work. These assets are being depreciated to net realisable value over the life of the operational asset including the land that is being used, as the land is not able to be separated from the rest of the asset.

Useful economic lives applied for depreciation charge

Asset type	Useful economic life (years)
Operational assets	15-100
Dwellings	10-60
Freehold buildings	10-60
Plant and machinery	3-25
Vehicles	3-25
Furniture and fittings	3-15
IT equipment	3-15

The range in the economic lives reflects the wide range of assets within each asset type.

Where the components of an asset are material in value to the fair value of the asset, the components are capitalised and depreciated separately. Components which are no longer used are written off.

Depreciation is not charged on assets under construction.

1.6. Intangible assets

Intangible assets with a value exceeding £5,000 are initially recorded at cost and are then revised annually through the use of suitable indices to fair value, reflecting depreciated replacement cost. Amortisation is calculated so as to write off the value of intangible assets on a straight line basis over the expected useful economic lives of the assets concerned.

Useful economic lives applied for amortisation charge

Asset type	Useful economic life (years)
Software licences and models	3-25
Websites and other internally generated IT	3-10

1.7. Assets held for sale

Non-current assets are classified as held for sale if the carrying amount will be recovered principally through a sale transaction rather than through continuing use. Depreciation ceases immediately on the classification of the assets as being held for sale. Assets are stated at the lower of their carrying amount and fair value, less costs to sell. They are recorded in the current assets section of the statement of financial position.

Non-current assets are only deemed to be assets held for sale if management is committed to a plan to sell and if the asset is being actively marketed at a price which is reasonable in relation to its current condition. Assets that have been sold post year end and before approval of the Financial Statements are revalued to fair value where amounts are significant.

1.8. Impairment

Impairments are recognised when the recoverable amount of non-current assets falls below their carrying amount, as a result of either a fall in value owing to market conditions or a loss in environmental (including flood defence) benefit.

In line with an adaptation in the FReM, any loss of economic benefit is recognised in full against expenditure. However, in order to align the balance in the revaluation reserve with that which would have resulted through strict application of International Accounting Standard (IAS) 36, an amount up to the value of the impairment is transferred to the general reserve for the individual assets concerned.

Downward revaluations, resulting from changes in market value, only result in impairment where the asset is revalued below its historical cost carrying amount. In these cases the accounting treatment is as for any other impairment, with amounts being firstly set against any accumulated balance in the revaluation reserve, and any amount in addition to this being recognised as impairment and recorded in the statement of comprehensive net expenditure.

1.9. Trade, contract and other receivables

Accumulated surpluses and deficits relating to water resources charges, flood risk management local levies and environmental protection charges are treated as deferred income or accrued income depending on whether the charging scheme is in surplus or deficit. These balances are only treated as deferred or accrued income where they have arisen as a result of unplanned circumstances in line with HM Treasury's Managing Public Money definition. This treatment overrides the standard revenue recognition criteria as per note 1.3.

The deferred and accrued balances are considered when setting future years' fees and charges, to enable a cost recovery position to be achieved over a reasonable time period, which due to timing differences is not considered appropriate within a single financial year. Where balances are not considered to have arisen due to unforeseeable events, the Environment Agency has taken appropriate action. Deferred income includes the environmental improvement unit charges received from non water company abstractors, to be used to fund compensation payments for the variation or revocation of abstraction licences. This change in licence conditions requires approval from the Secretary of State and the charges are used to reduce the environmental damage caused to watercourses through abstracting too much water. Charges are only raised where compensation has been assessed as likely to be paid in the future.

1.10. Leases

A finance lease is one which transfers substantially all the risks and rewards of ownership to the lessee. An operating lease is a lease other than a finance lease.

The determination of whether an arrangement is, or contains, a lease is based on the substance of that arrangement. This assessment is based on whether the arrangement is dependent on the use of a specific asset and conveys the right to use the asset.

Operating leases and the rentals thereon are charged to the statement of comprehensive net expenditure on a straight line basis over the term of the lease.

1.11. Cash and cash equivalents

Cash and cash equivalents include cash in hand and deposits with any qualifying financial institution, repayable on demand or maturing within 3 months of the date of acquisition and which are subject to an insignificant risk of change in value.

1.12. Provisions

The Environment Agency provides for obligations arising from past events where there is a present obligation at the date of the statement of financial position, if it is probable that it will be required to settle the obligation and a reliable estimate can be made.

1.13. Financial instruments

These comprise Financial Assets and Financial Liabilities.

1.13.1 Financial Assets

Loans, receivables and assets available for sale are classified as financial assets.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and which are not classified as available for sale. Loans and receivables are initially recognised at fair value and subsequently held at amortised cost using the effective interest method. Fair value is usually the original invoiced amount.

Following the transition to IFRS 9, the financial assets are categorised as "Fair Value through statement of comprehensive net expenditure".

1.13.2 Financial Liabilities

Financial liabilities are any contractual obligations to deliver cash or financial assets to a third party. The Environment Agency only has financial liabilities which are recognised initially at fair value and are subsequently held at amortised cost using the effective interest method. Financial liabilities are derecognised when the obligation has expired.

The Environment Agency holds certain financial instrument liabilities as a result of operating agreements with a number of water companies entered into at their privatisation. These liabilities are treated as perpetuities and recorded in the statement of financial position at amortised cost. The annual payments arising from these liabilities increase annually in line with the Retail Price Index (RPI).

The Environment Agency is exposed to the risk of changes in the rate of inflation. The RPI has fluctuated significantly over the life of these financial liabilities. This is a macro-economic risk that the Environment Agency cannot manage in any way. However the Environment Agency is able to recover the full cost of reservoir operating agreements through its charges on water abstraction.

1.14. Value added tax

By Treasury Order, the Environment Agency is classified as a body to which section 33 of the Value Added Tax Act 1994 applies. Accordingly the Environment Agency recovers tax paid on both business and non-business activities, although the recovery of VAT on exempt supplies is dependent on the threshold for exempt activities.

In all instances, where output tax is charged, or input tax is recoverable, the amounts included in these accounts are stated net of VAT.

1.15. Employee benefits

Pensions

The Environment Agency makes regular contributions to the Environment Agency's Pension Fund (known as the active fund) to fund current and future pension liabilities. Contributions are charged to the statement of comprehensive net expenditure taking account of the expected pension costs over the service lives of the employees and are set at a level sufficient to ensure the scheme is fully funded following formal actuarial valuations of the fund. The last triennial valuation of the active fund was at 31 March 2016. Liabilities for enhancements to employees' pension arrangements under the Environment Agency's voluntary severance scheme are accounted for in the year in which applications for severance are approved.

Other employee benefits

The Environment Agency recognises a liability and expense for all other employee benefits, including unused annual leave, accrued at the statement of financial position date, provided these amounts are material in the context of overall staff costs.

Termination benefits are recognised as a liability when the Environment Agency has a binding commitment to terminate the employment of an employee or group of employees before the normal retirement date, or as a result of an offer to encourage voluntary redundancy.

1.16. Internal drainage boards (IDBs) under common control

The Environment Agency administers the River Arun internal drainage districts (IDDs). It is a separate legal entity which has its own budgets and reporting arrangements. Their administration is discharged through an IDB. The Environment Agency Board approves the accounts of the IDB and therefore it is classed as a subsidiary of the Environment Agency for accounting purposes as they come under the common control of the Environment Agency's Board.

The River Arun internal drainage districts' annual income and expenditure is less than £0.2m and is therefore not material to the Environment Agency's accounts so their results have not been consolidated and the scheme for the future of the IDD remains under discussion.

1.17. Adoption of new and revised IFRS or FReM interpretations

IFRS

IAS 8 requires disclosures in respect of new IFRSs, amendments and interpretations that either are, or will be applicable after the reporting period. There are a number of IFRSs, amendments and interpretations that have been issued by the International Accounting Standards Board (IASB) that are effective for future reporting periods. The Environment Agency has not adopted any new IFRS standards early.

IFRS impacts

IFRS 16 - Leases (IAS 17 replacement)

EU adopted from 1 Jan 2019

Effective in UK government from 1 April 2020

The Environment Agency will adopt IFRS 16 from 1 April 2019 using the cumulative restatement approach as mandated by the FReM.

This standard replaces IAS 17 and sets out the principles for the recognition, measurement, presentation and disclosure of leases.

The main effect on the Environment Agency is that IFRS 16 introduces a single lessee accounting model and requires a lessee to recognise assets and liabilities for almost all leases and this will result in an increase of Property, plant and equipment and total financial debt at 1 April 2019.

At inception the Environment Agency will assess whether a contract is or contains a lease. This assessment involves the exercise of judgement about whether it depends on a specified asset, whether the Environment Agency contains substantially all of the economic benefits from the use of that asset, and whether the Environment Agency has the right to direct the use of the asset.

The Environment Agency has elected not to separate lease and non-lease components for leases of vehicles.

The Environment Agency will recognise a right of use (ROU) asset and a lease liability at the commencement of the lease. The ROU is initially measured based on the present value of lease payments, plus initial direct costs and the cost of obligations to refurbish the asset, less any incentives received. The ROU is depreciated over the shorter of the lease term or the useful life of the underlying asset on a straight line basis. The ROU is subject to testing for impairment if there is an indicator for impairment.

Lease payments generally include fixed payments and variable payments that depend on an index (such as in inflation index).

ROU assets are included in the heading Property, plant and equipment and the lease liability is included in the headings current and non-current financial debt.

The Environment Agency has elected not to recognise ROU assets and liabilities for leases where the total lease term is less than or equal to 12 months, or for leases of low value IT equipment.

The payments for such leases are recognised in the income statement on a straight line basis over the lease term.

As at 31 March 2019 the Environment Agency leased 99 offices and depots under leased buildings, 873 individual land leases and 3,452 leased vehicles with a total present value of £58.7m.

IFRS 17 – Insurance Contracts

This standard will apply to all types of insurance contract and proposes a building blocks approach based on the expected present value of future cash flows to measuring insurance contract liabilities. IFRS 17 is effective for annual periods beginning on or after 1 January 2021.

No other amendments are anticipated to have an impact on the financial statements.

FReM

Every year HM Treasury issues a new FReM, which interprets IFRS for the public sector. There are no known changes in the latest FReM which will affect the Environment Agency's financial reporting.

2. Segmental reporting

2.1. Analysis of net expenditure by segment

In accordance with IFRS 8, the Environment Agency is required to report financial and descriptive information about its operating segments. These are components about which separate financial information is available. Financial information is required to be reported on the same basis as is used internally by the Chief Operating Decision Makers (CODMs). For the Environment Agency, the CODMs are the Board and Executive Directors' team and they evaluate performance regularly using operating segments.

Definition of segments and other segmental information

The Environment Agency summarises its activities into 3 main segments which are reported to the CODMs. These are:

- FCERM (Flood and Coastal Erosion Risk Management). The main activity for FCERM is to help to predict, minimise and manage the risk of flooding in England.
- E&B (Environment and Business) grant-in-aid. This incorporates work funded by Defra in environment protection, fisheries and navigation. Further information is included in the Parliamentary accountability and audit report.
- E&B charges. This incorporates work funded by fees and charges for water resources, environment protection, fisheries and navigation.

There are no significant transactions between the segments and where costs relate to more than one segment they are apportioned appropriately with reference to the underlying substance of the transaction.

The Environment Agency does not rely on any single individual customer to undertake its activities.

Expenditure by operating segment

Statement of comprehensive net expenditure line	FCERM	E&B charges	E&B grant-in- aid	Total 2018-19	Total 2017-18
	£ million	£ million	£ million	£ million	£ million
Staff costs	204.6	215.5	71.3	491.4	483.1
Capital works expensed in year	313.1	1.7	13.6	328.3	298.1
Depreciation and amortisation	76.8	19.1	13.4	109.3	106.7
Other expenditure	282.6	141.6	41.7	465.9	427.3
Gross expenditure	877.0	377.9	140.0	1,394.9	1,315.2
Income from contracts with customers	(48.5)	(345.7)	0.0	(394.2)	(362.7)
Other income	(6.1)	(3.3)	(16.2)	(25.6)	(28.3)
Capital grants and contributions	(22.4)	0.0	0.0	(22.4)	(27.0)
Net expenditure	800.0	28.9	123.8	952.7	897.2

3. Staff costs

	2018-19	2017-18
	£ million	£ million
Wages and salaries	337.2	340.7
Social security costs	38.7	37.7
Normal contributions to the Active Pension Fund (defined benefit system)	51.1	46.5
	427.0	424.9
Other staff related costs:		
Agency staff wages and salaries	6.4	7.6
Other staff related costs	7.7	7.2
Exit package costs	0.3	0.7
Special contributions towards past service deficit	5.0	8.0
Less amounts included within the IAS 19 Pensions charge	(56.1)	(54.5)
Pensions Charge	148.2	129.4
	538.5	523.3
Less amounts charged to capital projects	(47.4)	(40.5)
	491.1	482.8
Amounts payable to Board members	0.3	0.3
Total staff costs	491.44	483.1

Note 15 provides details of the Environment Agency's pension arrangements. The Remuneration and staff report provides details of the remuneration of Board members and Executive Directors.

4. Capital works expensed in year

	2018-19	2017-18
Type of capital works	£ million	£ million
Beach replenishment	10.5	9.2
Catchment flood management plans	20.2	2.4
Culverts and channel improvements	25.9	14.7
Embankments	36.3	44.6
Flood risk management strategies	45.7	35.3
Flood mapping	2.9	3.8
Piling	1.8	2.6
Restoration and refurbishment	153.4	157.5
Rock groynes and sea walls	4.1	2.3
Other	27.5	25.7
Total	328.3	298.1

The above analysis includes £2.1 million (£1.6 million in 2017-18) of costs in relation to the Public Private Partnerships (PPP) projects at Pevensey Bay and Broadlands. Catchment flood management plans has been reclassified for 2017-18 and the costs moved from 'Other'.

Beach replenishment

This involves sand and shingle replacement on beaches to retain the integrity of a coastal defence.

Catchment flood management plans

Catchment flood management plans aim to establish flood risk management policies that deliver sustainable flood risk management for the long term across a catchment.

Culverts and channel improvements

This involves work on repairing or replacing culverts under land, roads and properties, and channel improvements that assist the flow of watercourses.

Flood risk management strategies

Strategies are developed to provide long term flood risk management options for fluvial catchments. It is from these long term strategies that individual flood risk projects are developed.

Embankments

This is for the creation, improvement or heightening of embankments to reduce the risk of water escaping from a river channel.

Flood mapping

Flood mapping is the production of multilayered maps which provide information on flooding from groundwater, rivers and the sea. Flood maps also have information on flood risk management assets and the areas benefiting from those assets.

Piling

This relates to the installation of piles (normally steel) along river banks to strengthen them and secure the adjacent land, and prevent landslips into the river causing obstructions. These works are largely below ground.

Restoration and refurbishment

This involves carrying out works to ensure that flood risk management assets are in the appropriate condition and restored to that condition.

Rock groynes and sea walls

Rock groynes and sea walls are built as part of sea and coastal flood risk management assets and are often used in conjunction with beach replenishment activity to prevent sea flooding. The responsibility for maintenance often resides with the local council.

5. Other expenditure

Type of expenditure	2018-19	2017-18
	£ million	£ million
Capital grants awarded to local authorities and IDBs	99.2	77.2
Hired and contracted services	66.4	68.4
Outsourced IT services	44.3	45.8
Fees and commissions	31.1	33.1
Reservoir operating agreements (note 5.3 and 16.1)	24.1	20.0
Transport and plant	16.8	18.8
Utilities	17.1	17.4
Travel and subsistence	13.2	15.8
Operating lease rentals - plant and machinery	14.8	14.7
Information technology	13.9	14.6
Defra group corporate services charge (note 5.1 and 17.2)	49.0	14.1
Building	15.5	13.3
Training	7.2	8.7
Operating lease rentals – other	8.3	7.6
Consumables and Materials	6.9	7.9
Grants and Contributions	7.5	7.4
Maintenance	3.4	3.9
Administration	1.5	1.6
Compensation Payments	0.8	0.3
External Auditor's remuneration: (note 5.2)	-	-
Bad debt write offs	2.5	(0.4)
Other	16.3	28.4
Impairment of non-current assets	6.7	6.0
Movement in provision for the impairment of receivables	(0.6)	2.7
Total	465.9	427.3

Debts are written off when considered to be irrecoverable. Outstanding trade and capital receivables are reviewed and high risk debts are identified and provided for.

Compensation payments include environmental improvement unit charges compensation payments, which are made to compensate licence holders for revocation of abstraction licences due to excessive water abstraction from one location, and any claims payable to parties as a result of Environment agency activity.

5.1. Defra Group Corporate Services

In 2017-18 the budget responsibility for corporate services was transferred to the Defra group head of function for each corporate service as part of a transformation programme intended to reduce duplication and improve effectiveness. This was formalised on 1 November 2017, in a partnership agreement between Defra and the Environment Agency defining the delivery of corporate services functions to the Environment Agency by Defra group. This included the transfer of the employment of corporate services staff from the Environment Agency to Defra. The full year cost of Defra group corporate services provided to the Environment Agency for 2018-19 was £130.2m, including £3m related to EU exit projects (2017-18 was £125.7m with no EU exit costs). The cost of corporate services did not reduce due to the demands of EU exit.

Staff costs relating to corporate services for the period up to 31 October 2017 are disclosed in note 3 and included in 2017-18. Expenditure relating to ongoing supplier contractual arrangements are classified within note 5, including those incurred after 1 November 2017.

£81m of the expenditure for the current year was incurred directly by the Environment Agency (2017-18: £111.6m) but as external supplier contracts end and move to Defra group contracts, costs will in future years be classified within the Defra group corporate services charge to the Environment Agency. Defra charged the Environment Agency £49m (2017-18: £14.1m) for expenditure it incurred relating to the provision of corporate services to the Environment Agency in 2018-19. Further information on the transfer of corporate services to Defra is provided in note 17.

5.2. Auditor's remuneration

The external auditor's remuneration is the audit fee for the statutory audit of £166,000 (2017-18: £159,500). The cost of the audit is classified within the cost of finance and was included in the corporate services charge (note 5). Note 17 explains that the corporate services of the Environment Agency, including finance, were transferred to Defra during 2017-18. No payment was made to the external auditor for non-audit work.

5.3. Reservoir operating agreements

Expenditure under reservoir operating agreements includes two components. The first and smaller component is reimbursement to water companies of their net costs of operating certain reservoirs, after deducting any income generated from hydroelectric power. The second element represents annual payments fixed at the time of the related agreements (generally in 1989 upon privatisation of water companies) as compensation for a return on reservoir assets and indexed annually by the RPI (note 16.1).

6. Income

	FCERM E&B E& Charges		E&B	Total	Total
		3.7		2018-19	2017-18
	£ million	£ million	£ million	£ million	£ million
Abstraction charges	-	(124.2)	-	(124.2)	(118.3)
EPR Water Quality	-	(70.3)	-	(70.3)	(55.3)
EPR Installations	-	(31.9)	-	(31.9)	(30.7)
EPR Waste	-	(31.9)	-	(31.9)	(29.4)
Fishing licence duties	-	(21.9)	-	(21.9)	(23.3)
Hazardous waste	-	(15.3)	-	(15.3)	(16.3)
Nuclear regulation	-	(15.6)	-	(15.6)	(13.8)
Navigation licence income	-	(9.0)	-	(9.0)	(8.7)
Emissions Trading and Carbon Reduction Commitment	-	(6.7)	-	(6.7)	(6.2)
Other charges	-	(17.9)	-	(17.9)	(18.9)
Flood risk levies	(40.6)	-	-	(40.6)	(33.6)
IDB precepts	(7.9)	-	-	(7.9)	(7.8)
Environmental Improvement Unit Charge Income	-	(1.0)	-	(1.0)	(0.4)
Income from contracts with customers	(48.5)	(345.7)	-	(394.2)	(362.7)
EU grants	(0.1)	-	(0.1)	(0.2)	(0.4)
Other grants	(0.6)	(0.1)	(3.4)	(4.1)	(3.8)
Other income	(5.4)	(3.2)	(12.7)	(21.3)	(24.1)
Other operating income	(6.1)	(3.3)	(16.2)	(25.6)	(28.3)
Contributions to flood defence schemes	(22.2)	0.0	0.0	(22.2)	(27.0)
Deferred grants released	(0.2)	0.0	0.0	(0.2)	0.0
Capital grants and contributions	(22.4)	0.0	0.0	(22.4)	(27.0)
Total income	(77.0)	(349.0)	(16.2)	(442.2)	(418.0)

7. Tangible Assets

At 31 March 2019	Operational assets	Freehold land	Dwellings	Freehold buildings	Plant and machinery	Vehicles	Furniture	ΙΤ	Assets under construction	Total
	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£million	£ million	£million
Cost or valuation										
At 1 April 2018	4,785.0	46.1	35.0	69.9	448.6	56.2	67.9	75.8	209.9	5,794.4
Capital expenditure	-	0.2	-	-	3.6	9.9	4.7	1.8	91.3	111.5
Assets commissioned in year	101.8	-	-	-	-	-	-	-	(101.8)	-
Disposals	(1.1)	(0.2)	-	(0.4)	(4.0)	(4.0)	-	(1.2)	-	(10.9)
Reclassification to held for sale	(6.3)	0.9	(0.3)	(1.9)	-	-	-	-	-	(7.6)
Revaluation and indexation	121.7	0.6	0.5	0.7	2.2	1.4	0.3	0.6	-	128.0
Impairment	(17.5)	-	-	-	-	-	-	-	(2.9)	(20.4)
Reclassification	0.8	-	-	-	-	-	-	-	(7.1)	(6.3)
At 31 March 2019	4,984.4	47.6	35.2	68.3	450.4	63.5	72.9	77.0	189.4	5,988.7
Depreciation										
At 1 April 2018	2,201.7	-	10.3	36.0	378.9	35.2	46.8	54.3	-	2,763.2
Provided during the period	57.4	-	0.9	1.4	9.9	6.3	4.1	6.0	-	86.0
Disposals	(0.4)	-	-	(0.1)	(3.8)	(3.9)	-	(1.2)	-	(9.4)
Revaluation and indexation	54.7	-	0.2	0.4	2.0	0.9	0.2	0.4	-	58.8
Impairment	(0.1)	-	-	-	-	-	-	-	-	(0.1)
Reclassification	0.1	-	-	-	-	-	-	-	-	0.1
At 31 March 2019	2,313.4	-	11.4	37.7	387.0	38.5	51.1	59.5	-	2,898.6
Net Book Value at 31 March 2019	2,671.0	47.6	23.8	30.6	63.4	25.0	21.8	17.5	189.4	3,090.1

At 31 March 2018	Operational assets	Freehold land	Dwellings	Freehold buildings	Plant and machinery	Vehicles	Furniture	ІТ	Assets under construction	Total
	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£million	£ million	£million
Cost or valuation										
At 1 April 2017	4,479.4	26.8	40.9	69.4	499.6	56.3	77.5	69.9	178.3	5,498.1
Capital expenditure	-	8.8	-	-	8.9	8.7	4.5	9.7	75.0	115.6
Assets commissioned in year	28.6	-	-	-	-	-	-	-	(28.6)	-
Disposals	(1.8)	(0.6)	(0.2)	(0.4)	(7.9)	(10.3)	-	-	-	(21.2)
Reclassification to held for sale	(4.3)	1.6	0.7	0.8	-	-	-	-	-	(1.2)
Revaluation and indexation	215.9	1.8	1.9	2.5	7.7	1.7	0.8	1.5	-	233.8
Impairment	(11.6)	-	-	-	(0.3)				(3.8)	(15.7)
Reclassification	78.8	7.7	(8.3)	(2.4)	(59.4)	(0.2)	(14.9)	(5.3)	(11.0)	(15.0)
At 31 March 2018	4,785.0	46.1	35.0	69.9	448.6	56.2	67.9	75.8	209.9	5,794.4
Depreciation										
At 1 April 2017	1,998.9	-	9.2	33.9	413.5	37.5	47.2	49.4	-	2,589.6
Provided during the period	53.9	-	0.9	1.7	11.2	6.5	5.6	5.8	-	85.6
Disposals	(0.3)	-		(0.1)	(7.5)	(9.9)	0.0	0.0	-	(17.8)
Revaluation and indexation	98.3	-	0.5	1.3	5.7	1.2	0.5	1.1	-	108.6
Impairment	(1.6)	-	-	-	-	-	-	-	-	(1.6)
Reclassification	52.5	-	(0.3)	(8.0)	(44.0)	(0.1)	(6.5)	(2.0)	-	(1.2)
At 31 March 2018	2,201.7	-	10.3	36.0	378.9	35.2	46.8	54.3	-	2,763.2
Net Book Value at 31 March 2018	2,583.3	46.1	24.7	33.9	69.7	21.0	21.1	21.5	209.9	3,031.2

Details of valuation

All of the Environment Agency's assets are owned and none are held under finance leases. All of the Environment Agency's administrative land and buildings, including dwellings, except assets under construction, were revalued at 1 April 2017 by external independent chartered surveyors, on the basis of open market value for administrative property and existing use for operational land. Indices from the Office for National Statistics and government Housing Price Index have been used to update this value at 31 March 2019. Intangible assets, plant and machinery, furniture and fittings, and operational assets were revalued internally at 31 March 2019 using suitable indices. The impact of both revaluations is shown as revaluation and indexation in notes 7 and 8 respectively for tangible and intangible assets.

Operational assets

Operational assets include £91.3 million (31 March 2018, £89.9 million) for land that forms an essential element of certain operational assets and has significantly changed its nature as a result. Operational assets include the Thames Barrier which is valued at £1,139million (31 March 2018, £1,131million) reflecting its depreciated replacement cost, revalued annually using relevant indexes. The Thames Barrier is expected to be in operation until 2070.

Assets held for sale

Included within Assets held for sale is revalued land of £7.2m that was subsequently sold in June 2019 with an original book value of £0.5m. In year movement of £7.6m added to the opening value of assets held for sale of £10.3m totals £17.9m held at 31 March 2019.

8. Intangible Assets

At 31 March 2019	Software licences	Websites	Other IT	Assets under construction	Total
Cost or valuation	£ million	£ million	£million	£ million	£million
At 1 April 2018	84.2	80.0	131.7	26.2	322.1
Capital expenditure	-	-	-	19.1	19.1
Assets commissioned in year	1.1	1.7	6.9	(9.7)	-
Disposals	-	(0.6)	(0.8)	-	(1.4)
Revaluation and indexation	0.6	0.6	1.1	-	2.3
Impairment	(0.3)	-	(0.1)	-	(0.4)
Reclassification	(0.8)	-	-	7.1	6.3
At 31 March 2019	84.8	81.7	138.8	42.7	348.0
Amortisation					
At 1 April 2018	38.3	69.5	96.2	-	204.0
Provided during the year	10.4	2.8	10.1	-	23.3
Disposals	-	(0.6)	(0.8)	-	(1.4)
Revaluation and indexation	0.4	0.5	0.8	-	1.7
Reclassification	(0.1)	-	-	-	(0.1)
At 31 March 2019	49.0	72.2	106.3	-	227.5
Net Book Value at 31 March 2019	35.8	9.5	32.5	42.7	120.5

At 31 March 2018	Software licences	Websites	Other IT	Assets under construction	Total
Cost or valuation	£ million	£ million	£million	£ million	£million
At 1 April 2017	69.6	67.8	122.6	28.5	288.5
Capital expenditure	-	-	-	12.8	12.8
Assets commissioned in year	7.1	10.9	8.1	(26.1)	-
Revaluation and indexation	1.7	1.6	2.5	-	5.8
Reclassification	5.8	(0.3)	(1.5)	11.0	15.0
At 31 March 2018	84.2	80.0	131.7	26.2	322.1
Amortisation					
At 1 April 2017	26.5	66.3	85.0	-	177.8
Provided during the year	9.2	2.1	9.8	-	21.1
Revaluation and indexation	0.7	1.4	1.8	-	3.9
Reclassification	1.9	(0.3)	(0.4)	-	1.2
At 31 March 2018	38.3	69.5	96.2	-	204.0
Net Book Value at 31 March 2018	45.9	10.5	35.5	26.2	118.1

9. Impairment

Impairments by Accounting Category	31 March 2019	31 March 2018
	£ million	£ million
Tangible assets (note 7)	13.9	8.1
Intangible assets (note 8)	0.1	-
Total charged to the revaluation reserve	14.0	8.1
Tangible assets (note 7)	6.4	6.0
Intangible assets (note 8)	0.3	
Total impairment charge to the statement of comprehensive net expenditure	6.7	6.0
Total impairment as per statement of financial position	20.7	14.1

In line with an adaptation in the FReM, any loss of economic benefit is recognised in full against expenditure. However, any temporary reduction in value is recognised in the revaluation reserve with any excess in expenditure.

10. Trade, contract and other receivables

	31 March 2019	31 March 2018
	£ million	£ million
Within one year:		
Trade receivables	27.7	24.7
Contract Assets:		
- Accrued income	30.1	29.6
Less: Expected Credit Loss for receivables and contract assets	(5.5)	(6.1)
	52.3	48.2
Other receivables:		
VAT	30.4	28.0
Employee loans	1.0	1.0
Prepayments	12.0	6.0
Total	95.7	83.2

Expected credit losses have been calculated per IFRS 15 as described in note 16 and not restated as the amounts were immaterial.

11. Cash and cash equivalents

	31 March 2019	31 March 2018
	£ million	£ million
At 1 April	114.1	89.0
Net change in cash and cash equivalent balances	(5.6)	25.1
At 31 March (as per statement of Cash Flows)	108.5	114.1

The balances were held as cash with the government banking service with no bank overdraft.

12. Trade, other payables and contract liabilities

	31 March 2019	31 March 2018
	£ million	£ million
Within one year:		
Other taxation and social security	(9.0)	(8.4)
Trade payables	(19.3)	(26.5)
Trade payables accrual	(103.1)	(71.6)
Holiday pay accrual	(6.9)	(6.9)
Other payables	(5.8)	(6.7)
Capital payables	(7.6)	(11.7)
Capital payables accrual	(49.2)	(51.2)
Contract liabilities:		
- Flood risk management	(71.9)	(71.8)
- Water resources - abstraction	-	(3.3)
- Water resources – Environmental Improvement Unit Charge	(19.8)	(20.5)
- Environment protection	(2.9)	(2.8)
Pension contribution liabilities	(5.4)	(5.3)
Customer deposits and receipts in advance	(64.2)	(48.6)
	(365.1)	(335.3)
More than one year:		
Trade and other payables and accruals	(1.2)	(1.3)
	(1.2)	(1.3)
Total	(366.3)	(336.6)

13. Transfers between reserves

13.1 For the period ended 31 March 2019

	Revaluation reserve	General reserve	Pension reserve	Total
	£ million	£ million	£ million	£ million
Realised revalued depreciation and disposals	(48.4)	48.4	-	-
Net pension charge	-	103.5	(103.5)	-
Total	(48.4)	151.9	(103.5)	-

13.2 For the period ended 31 March 2018

	Revaluation reserve	General reserve	Pension reserve	Total
	£ million	£ million	£ million	£ million
Realised revalued depreciation and disposals	(50.9)	50.9	-	-
Net pension charge	-	84.4	(84.4)	-
Total	(50.9)	135.3	(84.4)	-

14. Commitments

14.1 Capital Commitments

	31 March 2019	31 March 2018
	£ million	£ million
Contracted for but not provided in the financial statements	112.7	212.9

The amounts above relate to both tangible and intangible fixed assets. Commitments on capital works expensed in year at 31 March 2019 totalled £351.7 million (31 March 2018, £192.7 million). The majority of the significant commitments relate to the construction of flood defence schemes and the largest at 31 March 2019 was for the construction of the Hull River Humber defences (£55m).

14.2 Financial Commitments

The Environment Agency has entered into non-cancellable contracts (which are not leases).

Payments the Environment Agency is committed to	31 March 2019	31 March 2018
	£ million	£ million
Not more later than one year	26.8	19.4
More than one year and not later than five years	16.9	20.2
More than five years	1.7	3.6
Total	45.4	43.2

The largest commitments relate to the Broadlands flood alleviation project, Pevensey Bay beach maintenance and an outsourced IT service contract with Capgemini. Contracted future commitments in relation to these 3 commitments are respectively £12.2 million, £10.2 million and £19.6 million (2018: £16.8 million, £11.6 million and £13.2 million).

14.3 Commitments under Leases

The Environment Agency is committed to future minimum lease payments under operating leases.

Payments the Environment Agency is committed to	31 March 2019		31 March 20	18
	Land and buildings	Other	Land and buildings	Other
	£ million	£ million	£ million	£ million
Not more than 1 year	11.7	10.1	9.8	8.0
More than 1 year and not more than 5 years	33.9	13.9	31.1	12.7
More than 5 years	35.9	-	36.1	-
Total	81.5	24.0	77.0	20.7

The operating lease commitments above include costs that relate to the Environment Agency's proportion of occupation of Defra leasehold properties. These arrangements between the Environment Agency and Defra reflect a future commitment to reimburse Defra for the relevant portion of the underlying rentals paid to landlords for the provision of leasehold accommodation.

Defra group bodies also occupy Environment Agency buildings, and the full commitment on the leases is included above however there are arrangements to recover the portion of the underlying rentals from Defra group bodies.

Other leases mainly comprise of leases for Environment Agency vehicles.

15. Pension obligations

The Environment Agency operates a defined benefit pension scheme for current and former employees, and transferees from predecessor organisations. We are part of the LGPS, a statutory scheme primarily governed by the LGPS Regulations 2013 and the LGPS (Transitional Provisions, Savings and Amendment) Regulations 2014. These are subject to amendment over time. Further details on the Pension Fund including its annual report and financial statements, are on the Environment Agency Pension Fund website (www.eapf.org.uk).

The Environment Agency Pension Fund (EAPF) has 3 employers, the Environment Agency, Natural Resources Wales (NRW) and Shared Services Connected Limited (SSCL). NRW was admitted on 1 April 2013 and SSCL was admitted on 31 October 2013.

The total pension charge for the Environment Agency was £148m for the financial year 2018-19 (£129 million in 2017-18). The pension charge relating to the scheme was assessed in accordance with the advice of an independent qualified actuary using the projected unit method of valuation to calculate the service costs.

The Environment Agency's funding arrangements are to pay 14% of the monthly gross salary of members to the Pension Fund each month, and then pay a lump sum to meet the equivalent employer contribution of 18.5%.

The latest triennial actuarial valuation of the EAPF was at 31 March 2016. The assets taken at market value (£2.7 billion) were sufficient to cover 103% of the value of liabilities in respect of past service benefits which had accrued to members. The Environment Agency accepted the independent actuary's recommendation in respect of employer contributions.

The annual report and financial statements for the EAPF estimated that that it had sufficient assets to meet 102% of its expected future liabilities at 31 March 2019 on an ongoing funding basis. The Environment Agency's share of the EAPF's liabilities as reported in these financial statements is calculated using different actuarial assumptions, required by IAS 19, to those used in the EAPF's annual report. This leads to a different funding level to that reported by the EAPF.

The main difference in assumption is the discount rate used to value pension liabilities. The EAPF discount rate is based on long-term UK government bond yields and assumes a level of future asset outperformance by the bonds owned by the EAPF. The discount rate used in these financial statements, as required by IAS 19 is based on high quality corporate bond yields, with no additional asset performance assumption. The real terms discount rate in these financial statements is therefore 1.1% lower than the rate used in the EAPF financial statements. This lower rate results in a higher value being placed on liabilities. The sensitivity analysis in note 15.4 indicates the sensitivity of the fund liabilities to a difference in discount rate.

A number of assumptions are made as part of the actuarial valuation process. The prudent actuarial assumptions used do not represent a view on what future pay movements may be. It has been assumed that present and future pensions in payment will increase at the rate of 2.1% per annum. The estimated contribution payable by the Environment Agency, excluding any discretionary lump sum payments, for the year to 31 March 2019 will be approximately £51.8 million.

These financial statements include the disclosure requirements of IAS 19 for 2018-19 in relation to the Environment Agency's Active Fund. All calculations have been made by a qualified independent actuary and are based on the most recent actuarial valuation of the fund at 31 March 2016 updated to 31 March 2019. The assumptions underlying the calculation of a net liability at 31 March 2018 are only used for accounting purposes as required under IAS 19. There is no requirement for the reported net liability to be met as a lump sum. Cash contributions paid by the Environment Agency to the pension fund will continue to be set by reference to assumptions agreed at each triennial actuarial valuation of the scheme. The next triennial valuation will be as at 31 March 2019.

15.1. Financial and longevity assumptions

Financial assumptions for the Environment Agency pension fund

	% per annum 31 March 2019	% per annum 31 March 2018
Inflation and pension increase rate	2.2	2.1
Salary increase rate	2.5	2.4
Discount rate	2.4	2.7

Longevity assumptions: average future life expectancy at age 65

Scheme member	31 March 2019		31 March 20)18
	Male (years)	Female (years)	Male (years)	Female (years)
Current pensioners	23	24	23	24
Future pensioners (people aged 65 in 20 years)	24	27	24	27

15.2. Fair value of assets

Fair value of assets at 31 March 2019

Asset category	Active market quoted prices	Non-active market quoted prices	Total	% of total
	£ million	£ million	£million	%
Equity securities				
Common stock	560.5	-	560.5	17%
Other equity assets	34.1	-	34.1	1%
Debt securities:				
UK government bonds	-	322.2	322.2	10%
Corporate bonds	-	278.9	278.9	8%
Other	-	19.3	19.3	1%
Pooled investment vehicles:				
Equities	-	713.5	713.5	21%
Bonds	-	270.0	270.0	8%
Funds - real estate	523.4	119.3	642.7	19%
Partnerships and real estate	-	413.0	413.0	12%
Derivative contracts:				
Forward FX Contacts	-	(3.8)	(3.8)	0%
Cash and cash equivalents	-	87.1	87.1	3%
Totals	1,118.0	2,219.5	3,337.5	100%

Fair value of assets at 31 March 2018

Asset category	Active market quoted prices	Non-active market quoted prices	Total	% of total
	£ million	£ million	£million	%
Equity securities				
Common stock	740.6	1.5	742.1	24%
Other equity assets	2.7	-	2.7	-
Debt securities:				
UK government bonds	-	304.4	304.4	10%
Corporate bonds	-	264.4	264.4	9%
Other	-	18.1	18.1	1%
Pooled investment vehicles:				
Equities	-	367.6	367.6	12%
Bonds	248.4	294.5	542.9	18%
Funds - common stock	20.4	233.6	254.0	8%
Funds - real estate	3.8	99.9	103.7	3%
Funds – venture capital	-	0.4	0.4	-
Partnerships and real estate	-	382.1	382.1	12%
Other investment:				
Stapled securities	4.1	-	4.1	-
Derivative contracts:				
Equity Futures	(0.4)	-	(0.4)	-
Forward FX Contacts	-	0.8	0.8	-
Cash and cash equivalents	-	76.3	76.3	2%
Totals	1,019.6	2,043.6	3,063.2	100%

15.3. Change in fair value of employer assets, defined benefit obligation and net liability

Year ended 31 March 2019	Fair Valu Employe Assets		Defined Obligation		Net (liab asset	ility)/
	£million	£million	£million	£million	£million	£ million
Opening Position as at 1 April 2018		3,063.2		(3,463.5)		(400.3)
Pension benefits accrued						
by members during the						
year *	-		(127.0)		(127.0)	
Change in cost of						
pensions from previous			(0.4.0)		(0.4.0)	
years' service	-		(21.2)		(21.2)	
Total service cost (note						
3)		0.0		(148.2)		(148.2)
Interest income on plan	aa -		2.0		aa -	
assets	82.7		0.0		82.7	
Interest cost on defined	0.0		(04.5)		(O4 E)	
benefit obligation Total net interest	0.0		(94.5)		(94.5)	
(recognised in SOCNE)		00.7		(0.4.5)		(44.0)
· · ·		82.7		(94.5)		(11.8)
Plan participants' contributions	22.6		(22.6)		0.0	
Employer contributions			(22.6)			
	56.4		0.0		56.4	
Benefits paid	(72.2)		72.2		0.0	
Total cash flows		6.8		49.6		56.4
Expected closing						
position		3,152.7		(3,656.6)		(503.7)
Change in financial						
assumptions	0.0		(336.2)		(336.2)	
Return on assets						
excluding amounts						
included in net interest	184.6		0.0		184.6	
Total remeasurements						
recognised in Other						
Comprehensive		1046		(226.0)		(AEA C\
Expenditure Closing position as at 31		184.6		(336.2)		(151.6)
March 2019		3,337.3		(3,992.8)		(655.3)

The defined benefit obligation comprises approximately £2.3 billion, £0.5 billion and £1.1 billion in respect of employee members, deferred pensioners and pensioners respectively as at 31 March 2018 (£1.9 billion, £0.5 billion and £1.1 billion at 31 March 2018). There are no current unfunded obligations.

^{*}Includes an allowance for administration expenses of 0.6% of payroll costs.

^{**} Some former Environment Agency employees in Defra corporate services have elected to transfer their funds to the civil service pension fund

^{*} Includes an allowance for administration expenses of 0.4% of payroll costs.

Year ended 31 March 2018	Fair valu	ie of er assets	Funded of benefit o	defined bligations	Net (liabi asset	lity) or
	£million	£million	£million	£million	£million	£million
Opening position at 1 April 2017		2,960.7		(3,366.4)		(405.7)
Pension benefits accrued by members during the year*			(128.7)		(128.7)	
Change in cost of pensions from previous years' service			(0.7)		(0.7)	
Total service cost (note 3)		-		(129.4)		(129.4)
Income on scheme assets	77.1		-		77.1	
Interest cost on defined benefit obligation	-		(88.6)		(88.6)	
Total net interest (recognised in SOCNE)		77.1		(88.6)		(11.5)
Employees' contributions	23.3		(23.3)		-	
Employer contributions	56.5		-		56.5	
Benefits paid	(69.2)		69.2		-	
Total cash flows		10.6		45.9		56.5
Expected closing position		3,048.4		(3,538.5)		(490.1)
Change in financial assumptions	-		75.0		75.0	
Other changes such as inflation rate	14.8		-		14.8	
Total remeasurements (recognised in Other comprehensive expenditure)		14.8		75.0		89.8
Closing position at 31 March 2018		3,063.2		(3,463.5)		(400.3)

15.4. Sensitivity analysis

Sensitivities regarding the principal assumptions used to measure the scheme liabilities

Change in assumption	Approximate % increase in employer liability	Approximate monetary amount (£ million)
0.5% decrease in real discount rate	12%	457
0.5% increase in salary increase rate	2%	86
0.5% increase in pension increase rate	9%	363

15.5. IAS 19 Provision – McCloud judgments

When the LGPS was reformed in 2014, transitional protections were applied to certain older members within ten years of normal retirement age. The benefits accrued from 1 April 2014 by these members are subject to an 'underpin' which means that they cannot be lower than what they would have received under the previous benefit structure. The underpin ensures that these members do not lose out from the introduction of the new scheme by effectively giving them the better of the benefits from the old and new schemes.

In December 2018 the Court of Appeal upheld a ruling that similar transitional protections in the Judges' and Firefighters' Pension Schemes were unlawful on the grounds of age discrimination. The implications of the ruling are expected to apply to the LGPS (and other public service schemes) as well.

The value of the liability based on the IAS19 defined benefit obligation at 31 March 2019 and using the mid-point value of 0.6%, is calculated at £28.3m and is preceded for in past service costs. NAO and HMT are comfortable that this gives sufficient information to make an adjustment to the IAS 19 figures in the accounts. The Fund's actuary has estimated the following impact as the table below shows:

	Central estimate	Monetary impact based on central estimate £m	Possible range
Past service cost	0.6% of opening obligations	20.3	0.1% - 1.1%
Current service cost	1.7% of pay	5.6	0.4% – 3.2% of pay
Change in financial assumptions	Depends on past and current	2.4	Depends on past and current service cost
Closing defined benefit obligations	service cost	28.3	impact

15.6 Financial commitments

Out of a total of 845 in scope transferees, 438 (52%) of Corporate Services staff elected to transfer their deferred benefit from the EAPF into the Civil Service Pension Scheme amounting to approximately £60.6m as at 31 March 2019. The assets and liabilities of the transferring members are included in the EA's IAS19 position as at 31 March 2019. Neither the Environment Agency nor the EAPF have any additional liabilities relating to this transfer of pension benefits.

16. Financial instruments

Due to the largely non-trading nature of its activities and the way in which government bodies are financed, the Environment Agency is not exposed to the degree of financial risk faced by many business entities. Moreover, financial instruments play a much more limited role in creating or changing risk than would be typical of listed companies. The Environment Agency has very limited powers to borrow or invest surplus funds. Financial assets and liabilities are generated by day-to-day operational activities and are not held to manage the risks facing the Environment Agency in undertaking its activities.

IFRS 9 requires entities to estimate and account for expected credit losses for all relevant financial assets (trade, contract and other receivables), starting from when they first acquire a financial instrument.

The Environment Agency estimate is based on our historic experience of credit losses by charge scheme over the past three financial years, updated for any known future credit issues.

16.1. Financial liability - reservoir operating agreements

In 1989 a predecessor body to the Environment Agency, the National Rivers Authority, entered into a number of reservoir operating agreements with water companies, under section 126 of the Water Act 1989, re-enacted by section 20 of the Water Resources Act 1991.

These agreements contained two financial components. The first was for payment to the water companies of their operating costs for the reservoirs, net of income generated thereon by the companies, such as on hydroelectric power. The second was for fixed payments, indexed upwards annually based on the RPI, which are payable in perpetuity. The terms of these agreements were negotiated between HM Government and the water companies and were made to enable privatisation to occur.

The fixed component payable to the water companies is accounted for as a financial liability. The financial liability represents the contractual liability the Environment Agency has to the water companies. The full cost of reservoir operating agreements, including the elements that give rise to these financial liabilities, is recoverable under legislation through water resources abstraction licences. Water companies who receive payments for operating reservoirs also pay the majority of the charges for water abstraction.

Details of the financial liability reported on the statement of financial position

Counterparty	Amounts paid in 2018-19	Amounts paid in 2017-18	Liability at both period ends
	£ million	£ million	£ million
Northumbrian Water	21.1	18.9	(129.2)
Severn Trent Water	3.0	1.1	(12.4)
Total	24.1	20.0	(141.6)

The largest payments are payable to Northumbrian Water (in relation to Kielder reservoir) and Severn Trent Water (in relation to Lake Clywedog and Lake Vyrnwy reservoirs). The liabilities are measured as perpetuities at the real terms value according to the underlying reservoir operating agreements. The discounting applied reflects the opportunity cost to the taxpayer of entering into the agreement and liability compared to other opportunities for investment. This has been set at 6%, which is the equivalent HM Treasury 'green book' rate that would have applied at the inception of the agreements. Due to this fact, the Environment Agency believes that the carrying value is not materially different to the fair value of the liability.

Because the liabilities have been calculated on an amortised cost basis and as perpetuities, they will not change from year to year except in the unlikely event of an agreement ceasing. The agreements, and obligations to pay, will only cease if the water companies cease to be the entities controlling the reservoirs. In order to assess the sensitivity of liability to the discount rate, a change of 0.5% would mean a £11 million change in the liability.

The Environment Agency does not bear liquidity, credit or interest rate risk on these financial instruments, other than the fact that annual payments are linked to the RPI.

17. Related Parties

IAS 24 requires the Environment Agency to provide information on its transactions with related parties and further guidance has also been given by HM Treasury.

17.1 Controlling parties

The Environment Agency is a non-departmental public body of Defra. Defra and other bodies within the Defra group are regarded as a related party and the results of the Environment Agency are consolidated into the Defra annual report and accounts.

Funding received from Defra	2018-19	2017-18	
	£ million	£ million	
Defra environment protection grant-in-aid	(83.1)	(78.1)	
Defra flood defence grant-in-aid	(667.4)	(694.7)	
Defra IDB or local authority grant-in-aid	(99.5)	(77.2)	
Total	(850.0)	(850.0)	

17.2 Defra group Corporate Services

The property portfolio of the Defra group was managed centrally by Defra during the whole of 2018-19 in a manner to maximise the efficient use of the space available. As a result a number of properties owned by the Environment Agency were used by employees of Defra, Natural England (NE), the Rural Payments Agency (RPA) and the Animal and Plant Health Agency (APHA). Similarly Environment Agency employees worked from offices owned by Defra. The net charge made by Defra to the Environment Agency for this property use was included within the Defra group corporate services charge (note 5).

On 1 November 2017 a partnership agreement was made between Defra and the Environment Agency, whereby corporate services functions of the Environment Agency were transferred to Defra as part of a transformation programme intended to reduce duplication and improve effectiveness. The functions transferred were estates, facilities management, IT, procurement, finance, human resources, shared services and communications. The majority of the expenditure for 2018-19 and the prior year remained in the accounts of the Environment Agency due to ongoing supplier contract arrangements. This will reduce as new Defra groupwide contracts come into effect. Defra charged the Environment Agency £49m (2017-18: £14m) for expenditure incurred in the provision of corporate services to the Environment Agency (note 5.1). This comprised mostly of staff costs for transferred former employees as well as some supplier expenditure.

The fleet function of the Environment Agency in 2018-19 provided fleet management services to Defra, NE, RPA and APHA with a cost of £0.2m. This service provision provides economy of scale efficiencies for the group as a whole.

17.3 Other related parties

The Environment Agency had no other material related party transactions with organisations in which other Board members, Executive Directors or senior managers have declared an interest. The Remuneration and staff report provides further information on Board members and Executive Directors. The Environment Agency has 1 IDB which is under common control (see note 1.16).

18. IFRS 9 and 15 Transition Reporting

18.1 Changes in Accounting Policies

Except for the changes below, the Environment Agency has consistently applied the accounting policies to all periods presented in these consolidated financial statements.

HM Treasury have mandated that the public sector retrospectively apply IFRS 9 (Financial Instruments) and IFRS 15 (Revenue from Contracts with Customers) with the cumulative effect being recognised as an adjustment to the opening general fund within taxpayers' equity. The Environment Agency reviewed the impact of applying the cumulative effect method – i.e. by recognising the cumulative effect of initially applying IFRS 9 and IFRS 15 and as the difference was not material there has not been an adjustment to the opening balance of equity at 1 April 2018. Therefore, the comparative information has not been restated and continues to be reported under IAS 39, IAS 18 and IAS 11.

Using this transition approach for the initial application of IFRS 15, the opening position for all contracts which were not completed at 1 April 2018 has been reviewed, and adjusted where applicable. Contract assets and liabilities have been recognised in replacement for accrued and deferred income.

For IFRS 9, HM Treasury have also mandated retrospective application, with the cumulative effect being recognised as an adjustment to the opening general fund within taxpayers' equity. This has required consideration of the business model test and specified payments of principal and interest tests, a reassessment of the classification of all financial assets, and application of the expected credit loss model to applicable receivables held at 1 April 2018. The adjustment is not significant to the Environment Agency and no restatement has been made.

The transition to IFRS 9 means that the forward element of contracts is measured through other comprehensive expenditure, rather than directly in the statement of comprehensive net expenditure, as was previously the case under IAS 39.

18.2 Dual Reporting

The impact of IFRS 15 was not material so no adjustments were made to opening balances.

19. Events after the reporting date

Date of authorisation for issue

The Environment Agency's financial statements are laid before the Houses of Parliament by the Secretary of State for Environment, Food and Rural Affairs. IAS 10 requires the Accounting Officer to disclose the date on which the financial statements are authorised for issue. The authorised for issue date is the date of the Comptroller and Auditor General's audit certificate.

Land valued at £7.2m was sold in June 2019 and transferred to Assets Held for Sale as at 31 March 2019 (see note 7).

Appendix A: History of the Environment Agency

(Not subject to audit)

The Environment Agency was established on 8 August 1995 following Royal Assent for the Environment Act 1995. We took up our statutory powers and duties on 1 April 1996, when the functions of the National Rivers Authority, Her Majesty's Inspectorate of Pollution, the Waste Regulation Authorities and several smaller units of the Department of the Environment were transferred to us. Our registered office is Horizon House, Deanery Road, Bristol, BS1 5AH.

The Environment Agency is a non-departmental public body (NDPB). NDPBs are public bodies that, although not part of government departments, carry out functions on behalf of sponsor departments who fund them and monitor their performance. NDPBs are independent of the department that sponsors them and are managed as 'at arm's length' bodies.

During the year to 31 March 2019, our principal government sponsor remained Defra. However the Environment Agency also works closely with other principal government departments such as the Department for Business, Energy and Industrial Strategy and the Ministry for Housing, Communities and Local Government. Defra oversees the environmental policy framework within which the Environment Agency operates in England. We operate under a financial memorandum issued by Defra.

Appendix B: Sustainability data

(Not subject to audit)

Emissions, en travel	ergy and business	Unit	2016-	17	2017-18	2018-19
	Direct emissions (Scope 1)	tCO ₂ e	10,000)	9,000	10,000
2	Emissions from purchased energy (Scope 2)	tCO ₂ e	19,000)	18,000	16,000
3	Emissions produced by our suppliers (Scope 3)	tCO ₂ e	9,000		10,000	9,000
	Total gross emissions	tCO ₂ e	38,000)	37,000	35,000
£	Carbon intensity (per £ million expenditure)	tCO₂e	30		28	26
Business trav	el	Unit	2(016-17	2017-18	2018-19
	<u>* - </u>	Oilit		010 17	2017-10	2010-13
	Car and motorbike	tCO ₂		715	8,017	7,598
			e 7,			
	Car and motorbike	tCO ₂	e 7, e 1,	715	8,017	7,598
	Car and motorbike Rail	tCO ₂	e 7, e 1,	715 646	8,017 1,602	7,598 1,277
	Car and motorbike Rail Air	tCO ₂	e 7, e 1,	715 646 46	8,017 1,602 134	7,598 1,277 136

Office Waste		Unit	2016-17	2017-18	2018- 19
9100	Landfill	Tonnes	5	7	2.4
		£	20,000	27,000	18,000
(2)	Reused or Recycled	Tonnes	333	298	316
0	Incinerated to produce energy	Tonnes	37	21	18
	Reused or recycled electronic or electrical equipment	£	180,000	196,000	261,000
		Tonnes	11	26	20
	Total office waste	Tonnes	388	349	346
		£	200,000	223,000	279,000
	Waste intensity per full time employee	kg	36	33	30

Pension fund investment		Unit	2016-17	2017-18	2018-19
	Pension fund assets	£ million	2,911	3,063	3,337
	Investments in clean technology and other sustainable opportunities	%	34	34	39
0	Carbon footprint	tCO₂e per £ million	313	209	204

Resource co	onsumption	Unit	2016-17	2017-18	2018-19
d }-	Purchased gas and purchased	million kWh	52	55	62
	renewable electricity	£ million	5.5	5.4	7.3
© Implemental American State of the Control of the	Self-generated renewable energy	million kWh	-	1.4	0.6
	Water supplied	Cubic metres	50,729	50,881	48,473
		£	260,000	293,000	265,000
	Timber from a legal and sustainable source (directly purchased)	£	270,000	240,000	190,000
	Paper from renewable or	Reams	33,000	27,000	25,000
	recycled sources	£	3,000	3,000	3,000

Appendix C: Performance data

(Not subject to audit)

Objective 1: A Cleaner, healthier environment, benefiting people and the economy

	Success measure	Units	2018-19 target	2018-19 actual
	2 EA 1 Rivers, lakes and coastal waters are healthier	Kilometres	2,000	1,719
TOXIC	2 EA 2 We protect people, the environment and wildlife by reducing serious pollution incidents	Number of incidents in the last 12 months	493	400
	2 EA 3 We create new habitats	Hectares created	410	460
1/1/	2 EA 4 We reduce the number of high risk illegal waste sites	Number of high risk illegal waste sites	196	250
	2 EA 5 We reduce the risk of flooding for more households	Number of households better protected	185,000	193,604
	2 EA 6 We maintain our flood and coastal risk management assets at or above the target condition	% of high risk assets at target condition	97.5%	97.9%
	2 EA 7 We have a first class incident response capability Number of staff who are trained and ready to respond to incidents	Number of people	6,500	6,657
	2 EA 8 We successfully influence planning decisions by local authorities	% decision notices successfully influenced	97.0%	97.2%

Objective 4: Outstanding organisation

	Success measure	Units	2018-19 target	2018- 19 actual
£	4 EA 9 We manage our money efficiently	% Spend to budget	100%	100%
CO ₂	6 EA 12 We reduce our carbon footprint	Number of tonnes of CO ₂	32,000	30,930
PRINT	7 EA 14 We have a diverse workforce: (a) The proportion of our staff who are from a Black, Asian and Minority Ethnic (BAME) background	% of workforce	14%	4.1%
	(b) The proportion of our executive managers who are female	% of executive manager workforce	50%	35%
	4 EA 12 We provide a safe place to work	LTI freq rate per 100,000 hours	0.11	0.13

Appendix D: Corporate natural capital accounts

(Not subject to audit)

Renewables	Reported figures from 2017-18		Adjustment gains / (losses) ₁		2018-19 Additions/ Disposals ₂		Reporting year 2018-19		
	Lower £ Million	Upper £ Million	Lower £ Million	Upper £ Million	Lower £ Million	Upper £ Million	Lower £ Million	Mid point £ Million	Upper £ Million
Carbon Storage	2.9	47.9	(1.7)	(32.5)	-	0.1	1.2	7.9	15.4
Air Quality ₃	3.4	18.4	24.9	9.9	1.0	1.0	29.3	29.3	29.3
Agriculture	1.6	4.1	5.7	30.9	-	-	7.3	21.2	35.0
Recreation ₄	15.1	23.3	53.1	53.1	-	-	68.2	72.3	76.4
Properties Protected from floodings	52.6	52.6	-	-	-	-	52.6	52.6	52.6
Gross natural capital	75.6	146.3	81.9	61.3	1.0	1.1	158.6	183.3	208.8
Total operating and maintenance provisions	(43.8)	(43.8)	(4.1)	(4.1)	(1.4)	(1.4)	(49.3)	(49.3)	(49.3)
Total net natural capital	31.8	102.5	77.8	57.2	(0.4)	(0.4)	109.3	134.0	159.5

^{1 –} The adjustment gains / losses for this financial year reflect and change in the methods for calculating the measure, and the includion of additional measures of natural capital ecosystem services.

^{2 –} Air quality figures include numbers for the absorption of particulate matter of 10 micrometers or smaller, and sulphur oxides.

^{3 –} Figures for agriculture, include livestock and crop production by others on land that we own.

^{4 –} Recreational values from our sites at Steart and Medmerry were taken alongside a review of the EA's 'green urban spaces' and 'sports pitches'.

^{5 -} This represents the natural capital benefit of protection form flooding solely on natural asset land holdings owned by the EA. It therefore excludes all the flood protection benefits from damages avoided on constructed (non-natural) flood defence assets.

Appendix E: Board member attendance

(Not subject to audit)

Member	Board meeting	ARAC	PC	ISC	FCRM	E&B	RC
Emma Howard Boyd (Chair)	6 of 6	1 of 1	4 of 4	6 of 6	0 of 1	-	4 of 4
Richard Macdonald (Deputy Chair)	6 of 6	2 of 4	-	-	4 of 5	-	3 of 4
Maria Adebowale-Schwarte	6 of 6	-	3 of 4	-	-	3 of 3	3 of 4
Peter Ainsworth	3 of 3	-	-	-	2 of 2	1 of 1	-
Karen Burrows	3 of 3	1 of 1	1 of 1	-	-	1 of 1	0 of 1
Caroline Mason	6 of 6	-	1 of 1	-	-	2 of 3	-
Judith Batchelar	4 of 6	3 of 4	-	-	-	3 of 3	-
Lynne Frostick	4 of 6	-	-	-	4 of 5	-	-
Robert Gould	6 of 6	2 of 2	2 of 2	3 of 3	5 of 5	-	3 of 3
John Lelliott	6 of 6	4 of 4	-	-	3 of 3	-	-
Joanne Segars	4 of 4	2 of 2	2 of 2	2 of 3	3 of 3	-	1 of 1
John Varley	4 of 6	-	-	-	-	1 of 3	-
Gill Weeks	6 of 6	3 of 4	-	-	-	3 of 3	-

Board – 6 meetings in 2018-19

ARAC – Member of Audit and Risk Assurance Committee - 4 meetings in 2018-19

RC – Member of Remuneration Committee - 4 meetings in 2018-19

PC – Member of Pensions Committee - 4 meetings in 2018-19

ISC – Member of Investment Sub Committee – 6 meetings in 2018-19

FCRM – Member of Flood and Coastal Risk Management Committee - 5 meetings in 2018-19

EB – Member of Environment and Business Committee - 3 meetings in 2018-19

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