Environment Agency

Annual report and accounts for the financial year 2020 to 2021

HC 768

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Annual report and accounts for the financial year 2020-21

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We are the Environment Agency (EA). 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 air, land and water 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 and 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

The Environment Agency is delivering the government’s ambition to Build Back Greener: making industries fit for the future, helping lead the way to reach net zero by 2050, and creating a nature positive future. The COVID-19 pandemic made 2020-21 an exceptionally hard year for everyone in society and this brought new challenges to the public sector. The accomplishments in this report were delivered in that context.

In January 2021, I visited Greater Manchester with the Prime Minister where over 23,000 properties were protected from flooding during Storm Christoph. The Prime Minister said: “What I’m seeing here is the amazing operations that the Environment Agency makes. The way in which they are able to use flood gates, use improvised emergency flood defences to protect homes.”

Having completed the government’s six-year capital programme on time and on budget, this year we began the new £5.2 billion flood programme and started to put National Strategy for Flood and Coastal Erosion Risk Management to 2100 into action. The strategy was recently highlighted in the Committee on Climate Change’s 2021 Progress Report to Parliament on climate adaptation, which is something to champion at COP26[1].

While we have seen significant improvements in water quality over the last twenty years, the bottom line is England’s rivers are too polluted and this mainly comes from agriculture, water companies and urban environments. The ground-breaking decision to designate a stretch of the River Wharfe in Yorkshire as a bathing river means we need to recreate the success of England’s coastal bathing waters, where clean bathing water is good for nature, people’s health and wellbeing, and is important to the tourist economy.

Clear targets and regulatory focus combined with investment in the environment delivers change, but you need a deterrent. As the £90 million fine for Southern Water showed, those who break the law and damage the environment will pay a heavy price. Boards and shareholders alike should take note. Waste crime continues to blight communities, despite the impressive rate our teams shut them down, more appear. This societal problem goes far beyond the waste industry, the vast majority of whom comply with the regulations. Manufacturers and retailers also have a role and can contribute more to a circular economy.

The Environment Agency plays a significant role in enabling the technologies needed to decarbonise the UK economy, including nuclear, hydrogen and carbon capture and storage. This year, we began to operate the new UK Emissions Trading Scheme, which we helped to shape with the Department for Business, Energy and Industrial Strategy and the Devolved Administrations. We have launched a 2030 net zero roadmap, setting out credible action to bring down emissions in our operations and supply chain. The Environment Agency Pension Fund has also set a net zero goal.

More inclusive decision making, representative of communities we work in, leads to better outcomes. Ten of our fifteen area directors, two of our five executive directors and seven of

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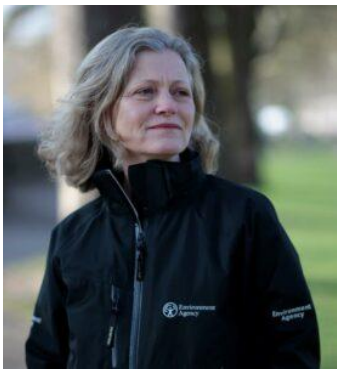
[1] COP26 is the 2021 edition of the United Nations Annual Climate Change Conference. COP stands for Conference of the Parties. Parties are the signatories of the United Nations Framework Convention on Climate Change (UNFCCC) - a treaty agreed in 1994 which has 197 Parties (196 countries and the EU). The 2021 conference, hosted by the UK in Glasgow, in partnership with Italy, is the 26th meeting of the Parties.

our twelve Board members are women, but we are a long way from being as diverse as the communities we serve, for instance on race. This year we launched a new Race Action Plan with actions focusing on recruitment and retention, and equitable outcomes and accessible services.

During the pandemic, the Environment Agency's wastewater experts at Starcross laboratory monitored sewage across the country to provide an early warning system of local COVID-19 outbreaks, and alongside our scientific support to GO-Science, it shows how we are helping the country out of the pandemic.

Most of the Environment Agency's funding comes from the government and with the extra pressure the pandemic has put on budgets, we are aware of demands on the public purse. The Environment Agency will continue to help the country level up with a green recovery in the best way possible with the funds we are allocated.

This year the Environment Agency responded to thousands of environmental incidents: flood, drought, fires, fish kills, and industrial accidents. Our staff who volunteer for incident duties alongside their day jobs, and those who pick up what's left behind, represent the best in public service. My thanks go to everyone at the Environment Agency for their work during this exceptional year.



Emma Howard Boyd, Chair

19th November 2021

Performance Report

Chief Executive's statement

It is no understatement to say that the past year has been like no other, both for the Environment Agency and the wider world. COVID-19 meant that practically overnight many of our staff went from being predominantly office-based to predominantly home-based and all those who work outside or in specialised workplaces needed to work out how to operate effectively and safely in this new context. I am proud that our teams managed to both sustain all our critical operations throughout the pandemic, and look after everyone's health and wellbeing, including the public's. On top of this, we responded to severe winter flooding, when our defences prevented tens of thousands of properties from flooding; and took on several important new duties as a result of the UK leaving the European Union (EU).

In the course of the last year, we also launched our five-year action plan, EA2025, which lays out our priorities for the coming years: a nation resilient to climate change; healthy air, land and water; and green growth and a sustainable future.

We also kept working to fulfil our core purpose: to create a better place. In 2020-21, we:

- Completed the government's six-year flood defence building programme on time, on budget, and on target, better protecting over 300,000 homes
- Maintained 94.5% of key flood defence assets at the required condition, despite the damage done by winter floods and climate change
- Responded to thousands of environmental incidents
- Improved air quality, reducing emissions of sulphur dioxide and other pollutants through our regulatory work
- Enhanced water quality in over 4,500 km of rivers by tackling pollution, unsustainable abstraction, and invasive species
- Created or restored nearly 2,000 hectares of habitat
- Secured 97.8% of planning decisions in line with our advice, reducing the risk of flooding and environmental harm while supporting sustainable growth
- Reduced the number of high-risk illegal waste sites which blight communities, with over 100 fewer active illegal waste sites across all risk categories at the end of 2020-21
- Achieved most (72%) of our planned climate adaptation measures
- Made further cuts in our own carbon emissions, down to just over 21,000 tonnes, keeping us on track to become a net zero organisation in 2030

There are other areas in which we can and will do better. There is more we can do to make the Environment Agency more diverse and inclusive, and we are working hard to improve in this area. And tragically, the organisation suffered the death of one of our employees in February 2021 in an on-site accident. While the Environment Agency has a very good health and safety record overall, we are putting in place further measures to seek to ensure this never happens again.

Overall, despite the extraordinary challenges of the past year, the staff at the Environment Agency have demonstrated astonishing resilience, looking after one another and delivering fantastic outcomes for the environment and the communities we serve. I want to say a huge thank you to all of them for everything they have accomplished this year. I am proud of you all.

J.D. Bevan

Sir James Bevan, Chief Executive and Accounting Officer

19th November 2021

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 three 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.

At 31 March 2021, we had 10,586 full time equivalent employees. Our annual expenditure for the financial year ended 31 March 2021 was £1.6 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. However, approximately one third of our funding is from other parties.

What we do

This year marks the first year of our five-year action plan: 'EA2025 creating a better place' which sets out what we want to achieve from 2020 to 2025.

The scale and pace of the changing climate means we need to think and work in different ways. Not only to minimise our own impact on the planet but also to be better prepared for the inevitable consequences.

We know the next five years are crucial if we are going to minimise wildlife loss, reduce emissions and prepare for impacts like floods and droughts.

Our five-year action plan (EA2025) sets out what we will do to face these challenges.

Our philosophy is that we should do more than just survive a changing climate; our aspiration is to help the country thrive in it.

The long-term goals at the heart of our plan remain unchanged: a nation resilient to climate change; healthy air, land and water; green growth and a sustainable future will drive everything we do today, tomorrow, to 2025 and beyond. These goals champion sustainable development, support our work to create better places and challenge us to tackle the climate emergency and deliver a green economic recovery for everyone.

The Government Strategic Framework and Defra Outcome Delivery Plan

Our vision is set by EA2025, the Defra group outcome framework and the government's 25 Year Environment Plan. We are here to make our air purer, our land greener, our water cleaner and our food more sustainable. Our mission is to restore and enhance the environment for the next generation, leaving it in a better state than we found it.

As we move to a new phase having left the EU, we will lead on our new responsibilities for EU repatriated functions, drive the country's sustainable recovery from the impacts of COVID-19, and support the government's agenda to level up and build back better for all. We will continue to work effectively and efficiently, ensuring that we have the right people, skills and structures in place to deliver our new and existing priorities with the best value for money for the public.

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 data in Appendix B. This gives a comprehensive overview of important environmental factors such as greenhouse gas emissions and waste 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.

Net zero by 2030

In October 2019, our Board agreed that we should be a net zero carbon organisation by 2030. We have chosen the most robust definition of this. We will reduce the emissions from all our operations, including our commuting and our supply chain, by a minimum of 45%. We will then invest in projects and measures to balance the residual emissions which we have not yet eliminated. This year we have developed our roadmap of how we will achieve this, in partnership with our supply chain and others. Our roadmap for cutting carbon emissions and reaching net zero by 2030 has been published on gov.uk.

Natural Capital

In the government's 25 Year Environmental Plan (published in 2018), the use of a natural capital approach was highlighted to better understand the benefits of work for the environment. A natural capital approach considers the air, water, soil and ecosystems that support all forms of life, and puts this into a financial account that looks at the longer-term benefits for people from protecting and improving the environment. This is an evolving area of work and the Environment Agency is committed to supporting the development of natural capital accounting across the Defra group and beyond. On page 27 you can find more information on natural capital for 2020-21.

UN Sustainable Development Goals

The UN has developed 17 goals 'to transform our world, end poverty, protect the planet and ensure prosperity for all'. This naturally aligns with the Environment Agency's core aims 'to create better places for people and wildlife and to support sustainable development'. We have looked at the aims and performance objectives of the Environment Agency and they align closely with the UN Sustainable Development Goals (SDGs).

For more information on the SDGs please see the United Nations website giving more details on the 17 goals: https://www.un.org/sustainabledevelopment.

In our performance report, we link the SDGs to each of our performance measures. For each of our performance measures, we have presented the most significant SDG applicable (Primary) alongside other goals that it also meets (Secondary).

Rural Proofing

The Environment Agency considers the rural aspects of its work in a variety of ways, in particular in relation to agriculture, river restoration and flood and coastal erosion risk management. As an organisation wherever we engage through regulation, advice and guidance or physical activity in rural areas, we take steps to ensure we engage with the relevant communities and representatives and seek joint outcomes wherever possible.

Some examples of this include:

- Working with the agriculture sector to understand future water requirements and on flood risk management
- Working with the National Farmers Union (NFU) on fly-tipping. Both the Environment Agency and NFU are members of the National Fly-Tipping Prevention Group chaired by Defra, along with many partners and representatives of local authorities, government and police
- The development of new regulatory and voluntary approaches such as the Farming Rules for Water and the government's Environmental Land Management Scheme (ELMS) are being done with close liaison and through co-design discussions with the key representatives from the agriculture sector. The design of ELMS is also specifically looking at how to achieve good environmental and climate outcomes
- We have also received additional funding from Defra for a range of our agricultural responsibilities through both Spending Review 2020 (SR20) and subsequent discussions with Defra. This includes:
    - £1.3 million to trial improvements to the way we regulate farming via a programme of farm inspections in a number of catchments across England
    - £0.4 million to investigate the use of geospatial mapping and remote technologies to support our on-farm inspection regime
    - £1.2 million to deliver additional farm inspections primarily focussed on farms impacting on Consent Order listed Natura 2000 sites and waterbodies not in Good Ecological Status due to impacts from farming in 2021-22

Performance Measures

This performance report outlines the Environment Agency’s performance against our priorities for the financial year from 1 April 2020 to 31 March 2021 (referred to throughout as 'the 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 published online. Previous versions of the scorecard are available on gov.uk for comparison.

A Nation Resilient to Climate Change

By 2025, we will have created more climate resilient places and infrastructure, by ensuring the nation is prepared for flooding, coastal change, and drought

We reduce the risk of flooding for more households

Primary Secondary

Target 300,000
Actual 314,361

This financial year, work on 185 schemes has resulted in 71,846 homes better protected in England. This brings the total since the start of our six-year capital programme in April 2015 to 314,361, exceeding our target of 300,000. Delivering the government’s £2.6 billion investment in flood and coastal defence schemes since 2015, the Environment Agency and partners have completed more than 850 projects to better protect more than 300,000 homes, thousands of businesses and major pieces of infrastructure.

The biggest contributors this year were the Humber Hull Frontage scheme, Exeter Flood Defence Scheme and Boston Barrier, located within Boston Haven.

In addition to better protecting 28,364 homes, the Humber Hull Frontage scheme better protected over 4,000 commercial properties, a nationally important port and transport hubs, two of Hull’s biggest employers, over 200 listed buildings, and two conservation areas. It also made improvements to the Trans Pennine trail to encourage recreational use, enhancements to the landscape at St Andrew Quay and Victoria Dock Village, water quality improvements through planting riparian vegetation, and delivered eight hectares of habitat created alongside the Quay.

The Exeter Flood Defence Scheme better protected 2,970 homes, 24 listed buildings, 2 scheduled monuments, 3 schools, 7 health centres, 84 electricity substations, a sewage treatment works, the London to Penzance railway and the Exeter Canal.

Boston barrier: better protecting homes from tidal flooding

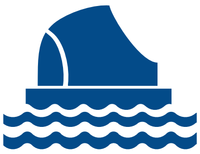
The Boston barrier is a steel cill sector gate rising from the riverbed, to allow vessels to pass through on a busy working river. It is the second largest project in terms of homes protected in the 2015-21 programme, better protecting 13,731 homes. The barrier weighs over 700 tonnes, and measures 28 metres wide and 11.5 metres high.

The barrier gate can be raised in 20 minutes, in response to North Sea tidal surges.

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

Primary Secondary

Target 98%
Actual 94.5%



We maintained 94.5% of flood and coastal risk management assets at their required condition against a target of 98% this year. The shortfall reflects the damaging impact of the multiple significant floods which occurred in 2020 and early 2021. Currently 11 of 14 areas are more than 1% below the national target. This has been further impacted by COVID-19 restrictions on the delivery work. Asset condition is also reducing because the present level of maintenance funding is not sufficient to keep up with the rate of deterioration and the increasing number of assets. We have bid for additional funding as part of the Environment Agency's allocation from the recent Spending Review 2021 (SR21) settlement.

For 2020-21, the government provided £120 million of additional funding for asset repairs. We have prioritised the maintenance of the highest risk assets and the implementation of risk mitigation measures and contingency plans for our assets.

Where assets are below their required condition this means that work is required, it does not mean that they have structurally failed or that their performance in a flood is 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 fully repaired or replaced.

Didsbury Reservoir Outlet Structure: Restoring FCRM Assets to Target Condition

As part of our strategic goal of building a nation resilient to climate change, we aim to maintain our Flood and Coastal Risk Management (FCRM) assets at or above their target condition. In 2020-21, we repaired 2,325 assets that had deteriorated, to bring them back above target condition and to reduce the risk of flooding to people, homes and businesses.

Didsbury Reservoir is a flood storage area on the River Mersey, which is used to reduce flood flows on the river as it enters south Manchester. The retention of water within the reservoir is controlled by a pair of penstock valves at its downstream end, but one of the valves was found to have been vandalised by arson and was inoperable.

The area team quickly removed the damaged valve and mitigated the flood risk by temporarily sealing the outlet with large dumpy bags, and a welded metal plate in place of the valve. Soon after, a permanent repair was commissioned. A new penstock valve was installed, and the area team took the opportunity to use an improved penstock design that offers better management of water levels within the reservoir.

In January 2021, Storm Christoph hit the North West, and a Severe Flood Warning (our highest flood warning level, meaning risk to life) was issued for South Manchester. Thankfully the repairs to Didsbury Reservoir had been completed, and the repaired valves played their part in protecting the city.

By 2025, we will be a stronger leader on climate adaptation and resilience, encouraging others to act now on the climate emergency

We will deliver our strategic adaptation actions to tackle the climate emergency

Primary

13 CLIMATE ACTION

Secondary

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

14 LIFE BELOW WATER

15 LIFE ON LAND

Target 90%
Actual 72%

We have made significant progress towards our actions to prepare for climate change recorded in our second adaptation report, however we have not met our target to complete or be on track to complete 90% of actions by the end of the five years (April 2021). This is due to a variety of reasons. COVID-19 has had a significant impact whilst other factors have contributed to about a quarter of the actions not being on track.

Changing national policy priorities has meant that some actions set in 2016 were obsolete or superseded by new commitments. Also, the second adaptation report provided a snapshot of our goals in 2016 but does not capture everything that the Environment Agency has done on adaptation since then. It does not include many of our new and business as usual adaptation activities (e.g. our National Adaptation Programme actions or evidence and data work).

As we move to the next reporting period, we have completed our assessment of climate risks and are drawing them together into our third adaptation report. This report appraises which actions to carry forward and includes actions from the National Flood and Coastal Erosion Risk Management Strategy for England. We published the third adaptation report in summer 2021. We will use this report, alongside other key indicators of our adaptation work to develop a new set of actions to monitor our progress in the coming years.

The focus going forward will therefore be on our new adaptation report and to ensure that residual risks are picked up in a suite of ambitious actions designed to tackle them.

By 2025, we will be a recognised and trusted incident management organisation responding rapidly to environmental emergencies to protect people and the environment

We have a first-class incident response capability - number of staff trained and ready to respond to incidents

Primary Secondary

We have continued to exceed our target of 6,000 trained and capable people ready to respond to incidents this year. There are approximately 6,400 trained and capable staff and a pool of around 800 people in training who will contribute to our ready workforce as they become capable and confident in their roles.

This year we have enhanced our status as a professional trusted emergency responder through the embedding of dedicated local Area Incident Teams who provide a tactical first response to incidents. We have also introduced a clear accreditation training pathway for key incident roles.

In January 2021, the Prime Minister visited Didsbury, an area that was significantly impacted by the events of Storm Christoph. He said “What I’m seeing here is the amazing operations that the Environment Agency makes. The way in which they are able to use flood gates, use improvised emergency flood defences to protect homes. I think 10,000 homes in the Manchester area – the Didsbury area – have been protected just as a result of what they’ve been doing overnight. There will be more to come. There will be further rain next week, so it’s vital for people in potentially impacted areas to follow the advice and get the Environment Agency flood alerts where they can. You can get them on an app, which lets you know what's going on. I just want to thank the Environment Agency, the emergency services, police for everything they're doing."

In 2021-22, we will use a new measure that will better gauge the resilience of our capability: the proportion of our people who are trained to work on incidents, who are rostered over the year.

The Flood Warning Expansion Project has added 21,531 properties to the flood warning service since April 2019 and aims to add a further 40,000 properties to the service by December 2022. The project was initially funded with £5 million from the 2018 Autumn Statement.

Healthy Air, Land and Water

EA2025 HEALTHY AIR, LAND AND WATER

By 2025, our air will be cleaner and healthier

Air quality is improving – Monitor the reductions across five priority pollutants: NOX (Oxides of Nitrogen), SOX (Oxides of Sulphur), NMVOC (Non-methane volatile organic compound), NH3 (Ammonia) and particulates in the refineries sector

Primary: 13 Climate Action

Secondary: 3 Good Health and Well-being; 12 Responsible Consumption and Production; 15 Life on Land

Targets <431 SOX, <203 NOX;
Actuals 421.56 SOX, 236.24 NOX

Emissions of sulphur dioxides and nitrogen oxides are trending below the 2017 baseline, which have reduced due to revised limits in environmental permits during 2018.

Reduced operations due to the pandemic may have led to plant inefficiencies, which may have had a negative impact on air emissions in 2020.

Emissions of sulphur dioxide per ton of oil processed have reduced by more than 10% and met the target. Although there has been a reduction in the total quantity of nitrogen oxides emitted from the refineries sector, this has not been enough to meet our 10% reduction target. Lower demand for the oil refineries' products during the pandemic may have led to reduced production efficiencies.

We will carry out audits of emissions to understand why the expected reductions have occurred for one pollutant, but not the other.

By 2025, our rivers, lakes, groundwater and coasts will have better water quality and will be better places for people and wildlife

Our rivers and coasts have better water quality and are better places for wildlife

Primary Secondary

Target 3,900

Actual 4,551

During this financial year we have enhanced a total of 4,551 km of the water environment, a significant achievement given COVID-19 restrictions. This brings the total to over 11,000 km enhanced since the publication of the 2015 updated river basin management plans, exceeding the overall target of achieving 8,000 km by December 2021.

Kilometres enhanced is an important metric within the Environment Agency's wider work on improving water quality – showing the results of our work and our work with partners to reduce known problems in the water environment. Multiple actions and interventions are needed to deliver, over time, the outcomes we want to see.

Key enhancements made this year include work on tackling pollution, abstraction and flow challenges and invasive species:

- Installation of an elver pass on flood gates in Eastbourne, Sussex, opening up 9.5 km of river for this internationally important protected species
- Environment Officers in North Devon have brought 55 km of enhancements through a targeted farm campaign focused on reducing diffuse pollution
- Improvements at sewage treatment works and pumping stations across Lincolnshire, the West Midlands and Yorkshire have collectively enhanced a further 10.5 km of watercourse

Partnership projects such as the Ribble Life Together Farm Advice and Improvement project have advised and supported farmers with stewardship, improving farming practices through concrete yard renewal, farmyard manure store construction and water course fencing and tree planting.

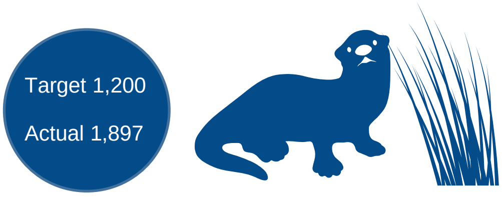
In addition, 88 km of rivers and groundwaters have been protected from deterioration. Examples include removal and treatment of the highly invasive non-native species floating pennywort on the River Nene, Northamptonshire, and the introduction of "hands off" flow conditions to abstraction licences in Yorkshire.

Case Study: Reducing the impact of pet flea and tick treatments on the environment

The Environment Agency's monitoring detected the presence of a number of insecticides in water. We investigated and found two very toxic insecticides at levels likely to cause an ecological impact. The most likely source is as a result of pet owners treating their companion animals with spot-on liquids for fleas and ticks. As a result of our monitoring programme, we are working with Defra's Veterinary Medicines Directorate to report back on the presence of all veterinary medicines we detect in our monitoring programme. We've already been able to influence the information given to users of flea treatments to protect against the release of these toxic substances to water.

We increase biodiversity and promote an environmental net gain by creating more and better habitats for the benefit of people and wildlife

Primary Secondary



Despite a difficult year for priority habitat creation and restoration projects our local teams have exceeded expectations. Working with our partners we created 744 hectares of new priority habitat and restored a further 1,153 hectares. Blanket bog made up the majority of our contribution this year with 447 hectares created from degraded or eroding peat and a further 835 hectares restored.

Since 2010-11, we have created a total of 8,353 hectares of new priority habitat against a challenging ambition of 10,000 hectares. We have also restored another 11,316 hectares of similar habitat types in that time.

Case Study: Moors for the future

This project has restored degraded upland habitats through peatland creation, restoration and grip blocking and to provide a reduction in flood risk to the communities downstream. This is a major partnership delivering multiple benefits across the Peak District and South Pennine Moors. The benefits this project gives include those to air, soil, water quality, biodiversity, control of pests or diseases, food production, geodiversity, hazard management, increased knowledge, pollinators, reduced soil erosion, the wider landscape, and water supply. We've created over 210 hectares of new blanket bog and restored a further 3,232 hectares over the eight year project.

Green Growth and a Sustainable Future

By 2025, we will achieve cleaner growth by supporting businesses and communities to make good choices, through our roles as a regulator, adviser, operator and enabler

We successfully influence planning decisions made by local authorities

Primary Secondary

Target
97%
Actual
98%

This measure considers how successful we are at influencing local planning authorities' (LPAs) decisions on development proposals. The advice we provide as a planning consultee helps LPAs make informed decisions on planning applications. Using our knowledge and expertise we assess the potential harm and risk from environmental factors to life and property. Where proposals are likely to have adverse impacts on people or the environment, we will make suggestions to improve the proposed development and mitigate or negate potential harm. We often request planning conditions to make proposals acceptable. But where the environmental harm is too great, we will object to planning applications.

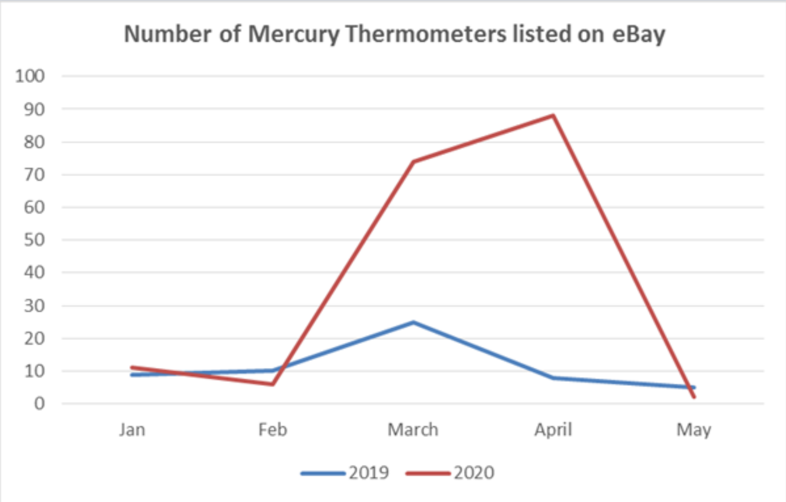
Performance at year end was 98% against a target of 97%. We objected to 44 applications not determined in line with our advice. Although not all decisions were in line with our advice, our monitoring this year shows how working with developers and local planning authorities has helped resolve significant environmental issues. This could have led to 312 planning applications, with the potential to create over 25,200 new residential units, being refused. These residential developments, once built, will help contribute over £380 million to the UK economy.

Development creates new jobs and increases economic output, and our influence ensures that this is achieved sustainably without adverse impact on the environment. Our advice ensures that we protect important environmental assets. These include drinking water supplies, priority habitats and species and designated conservation sites. We have protected the quality of our rivers and groundwater, helped bring land back into beneficial use where previously it was contaminated and ensured that new and existing land and properties are protected from the risk of flooding.

Case Study: Mercury Thermometers

The Environment Agency has a responsibility for market surveillance to ensure compliance with chemical legislation. We regularly prevent the sale of illegal goods in England to protect the environment from the most harmful substances. Just one example of this is our work to monitor web-based sales of illegal products, in this case mercury thermometers. Our Chemical Compliance Team detects and removes these product listings from the internet.

Between February and April 2020, we detected and were able to respond to a 300% increase in the number of attempts to sell these items as the COVID-19 pandemic started. Our flexible and responsive compliance model allows us to respond quickly to intelligence and take rapid action to get these products off the market.



By 2025, we will have cut waste crime and helped develop a circular economy

We reduce the number of high-risk illegal waste sites

Primary Secondary

At the end of this financial year, the number of high-risk illegal waste sites has reduced to 206 against the target of 216.

Our ongoing focus on data quality has had a positive impact on our illegal waste site numbers.

We consider these numbers to be the result of three factors: Operational success, improvements in our data management and the impacts of the pandemic.

The first of these factors is in part the result of new ways of working that have been developed or processed during the pandemic. For instance, operational teams have increased their desk-based working and made increasing use of drones to remotely observe sites. These virtual methods are less resource intensive and in the case of drones can provide images of very large or difficult to access sites.

A recent push to improve data management has meant that a large number of open cases on the management system were closed which further reduced the numbers.

The effects of the pandemic are still being considered: while operational teams have been able to adapt to new ways of working, restrictions meant that they could not substantiate all new sites as they normally would. We may also have received fewer reports than we normally would because members of the public were not out and about as much as usual.

Additional Waste Crime Funding (AWCF) accounts for £10 million of the total Agency enforcement budget of around £17 million. The AWCF is due to come to an end at the end of March 2022 and any continued funding is dependent upon the Environment Agency’s allocation from the recent Spending Review 2021 (SR21) settlement.

By 2025, we will be on track to deliver our sustainable business commitments, including to be net zero by 2030

A net zero carbon organisation by 2030

Primary Secondary

By the end of 2020-21, we met our carbon emission target for the year (21,406 tonnes actual against a target limit of 28,780 tonnes). We have seen a significant 32% reduction in our overall direct carbon emissions compared to the 2019-20 figure of 31,217, primarily due to the impact of the pandemic on our buildings and business travel emissions.

We have seen a 22% reduction in our buildings carbon emission compared to last year. Savings from electricity and gas were less than initially expected as a result of the required increased ventilation needed to stay in line with COVID-19 work safe protocols.

Our emissions from business travel have decreased by 48% compared to last year. We have seen a significant reduction in our business travel mileage as well as associated emissions due to COVID-19 related working from home and business travel restrictions. As lockdown restrictions ease, we need to do our best to entrench these reductions and avoid a return to 2019-20 levels of emissions, as we design our future blended working.

The biggest contribution to our direct carbon emission this year has been our operational assets, making up nearly 50% of our emissions. Emissions from our pumping activities are 21% lower than last year. This is mainly due to reduced use of the Ely-Ouse Water Transfer Scheme in the last six months of 2020-21.

Our emissions from laboratories have reduced by 21% compared to last year. Much of the equipment used for routine analysis has been turned off which has resulted in lower emissions than we see in a normal year. However, our laboratories have been operating round the clock, consuming additional energy and emitting carbon as part of the COVID-19 wastewater project, which detects levels of COVID-19 in the population by analysing wastewater samples. The project provides important data that can help support the UK’s management of the pandemic. It is a partnership led by Defra, the Environment Agency and the Joint Biosecurity Centre.

Life Enhancing Organisation

We manage our money efficiently

Primary: 8 Decent work and economic growth

Secondary: 9 Industry, innovation and infrastructure; 16 Peace, justice and strong institutions

Target
£1,630m

Actual
£1,652m

The Environment Agency has a major programme of capital and resource projects and conducts a very detailed planning process in order to ensure appropriate prioritisation of these investments. We are subject to a series of appropriate strong financial and governance controls that both protect this investment and provide a logistical challenge in delivering the programme of expenditure. This is therefore considered an appropriate measure, with expenditure being a proxy for delivery of environmental outcomes and this measure is therefore inextricably linked to most of the other scorecard measures.

The Environment Agency spent £1.65 billion in 2020-21, around 15% above the level of spend in 2019-20, a reflection of significant additional flood defence and water asset funding allocations confirmed in March 2020. Spending levels for 2020-21 were 1% higher than budget. Delivering a much-enlarged capital programme during a pandemic was challenging, particularly in relation to the additional funding received just prior to the start of the financial year. The Environment Agency's core flood and coastal risk management capital programme continued to deliver strongly, successfully achieving the 300,000 homes better protected target across the six-year programme of capital investment between 2015 and 2021, on time and budget. This is despite the COVID-19 pandemic having a cost impact on delivery of flood defence schemes. Of our 45 approved 2020-21 business case update reports, which seek changes to budget approval amounts by more than £500,000, 23 included increases that were partly due to COVID-19. The total increase requested by those 23 was £18 million. Eight of the updates related solely to COVID-19 and totalled £14 million. The main reasons for the increased costs were workforce capacity constraints, delays in obtaining materials and additional complexities working under COVID-19 secure restrictions, for both the Environment Agency and its contractors.

The 2021-22 financial year will see an increased level of core capital flood and coastal risk management programme funding. This will be a challenge to deliver due to the larger programme, final confirmation of funding at the start of the financial year, and the need to recruit additional staff. We are increasing our focus on early forecasting during the new financial year 2021-22, as this is critical to achieving full investment of funding for the year and beyond. The Environment Agency will be restructured under the Fit for 2025 programme to enable it to best deliver this bigger programme.

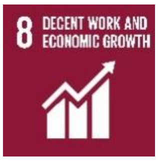
We have a diverse workforce

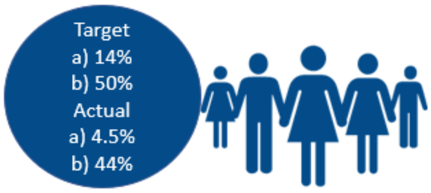
a) The proportion of our staff who are from a Black, Asian and Minority Ethnic (BAME) background

b) The proportion of our executive managers who are female

Primary

Secondary





In common with other leading employers, we continue to set targets showing our desire to have a workforce which reflects the UK working age population. At the end of the financial year the proportion of BAME employees in the Environment Agency stood at 4.5%, against our target of 14%. This target will be reviewed in March 2022 when initial 2021 census data should be available.

We are working on a refreshed Environment Agency Equality, Diversity and Inclusion (EDI) strategy and EDI action plan. This will further support our previously launched Race Action Plan (RAP). It will set out our EDI ambition along with clear EDI actions and measures of success that support the entire organisation to be truly inclusive.

The percentage of Executive Managers (EMs) who are female is 44% against the target of 50% with the headcount rising from 40 to 41 out of a total EM headcount of 94.

Although our race and gender levels are below targets, they are the highest ever and we will increase momentum through a more targeted approach and appropriate resources.

We have the lowest possible lost time incident frequency rate

Primary

3 GOOD HEALTH AND WELL-BEING

Secondary

8 DECENT WORK AND ECONOMIC GROWTH

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Target 0.11
Actual 0.10

Lost Time Incident Frequency Rate (LTIFR) is a universally accepted lagging indicator of health and safety performance. We define lost time incidents as work related injuries resulting in a day or more lost time. Such a conservative definition, plus a very low ceiling of 0.11 injuries per 100,000 hours worked, sets a challenging ambition.

This year we experienced a tragic fatality at work. In response we have made a series of changes to enhance future health and safety management in the Environment Agency. Otherwise, we saw a stabilisation of normal activities in the field, as most "office" work continued to be done at home. The number and type of incidents still remains influenced by the change in working patterns due to COVID-19.

Natural Capital (not subject to audit)

The natural capital of the Environment Agency estate

Our estate is exceptionally diverse, comprising around 17,400 hectares of coastal plains, river corridors, farmland, woodlands, wetlands and brownfield sites. It includes over a hundred commercial and residential properties and thousands of operational assets. Our natural capital assets provide an annual benefit to society of approximately £13 million through the provision of carbon sequestration, flood mitigation, agriculture, air quality and recreation. The natural capital within our estate makes a vital contribution to the delivery of our eMission commitments by sequestering approximately 6,500 tonnes of carbon each year (EA Corporate Natural Capital Account 2019-20). It also assists in the Environment Agency's Nature and Species Recovery programmes by providing habitats to support environmental improvements.

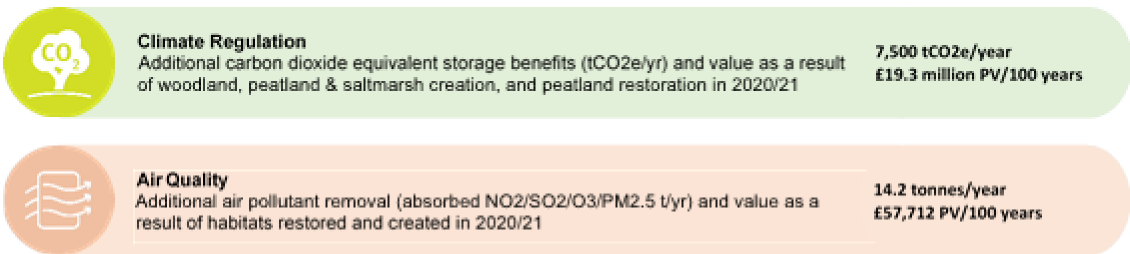
A natural capital approach is becoming an increasingly important tool within the management of our estate. For instance, we are using natural capital evidence when reviewing surplus land disposal decisions to ensure they maximise the benefits for people and wildlife. For example, a carbon sequestration study of land proposed for sale identified sites with greatest potential for peatland restoration and therefore greater potential for climate regulation services. Those sites with a higher potential natural capital value were retained for possible use in the future to help offset our organisation's carbon emissions, whilst the lower value sites were put forward for sale to help fund a habitat creation project in the Ouse Washes, East Anglia. This work showcased how considering both the financial and natural capital assets we hold when taking decisions can deliver multiple outcomes.

Creating new habitats and delivering natural capital benefits

In the 'Environment Agency: Reaching net zero by 2030' report our strategic focus is on "firstly reducing our emissions by at least 45% and then working to absorb or offset our remaining emissions through projects that achieve multiple wide-ranging, long-lasting benefits for people and nature – the concept known as environmental net gain."

Every year we work with partners to create or restore priority habitats. This year we have developed natural capital metrics, such as those shown in the image below, to demonstrate how these projects deliver, not only created and restored priority habitats, but also environmental net gain and practical climate change action.

In 2020-21, these projects have resulted in an additional 14.2 tonnes per year of air pollutants being removed from the atmosphere and 7,500 tonnes of additional carbon dioxide equivalent sequestered each year. These improvements will directly support the 25 Year Environment Plan goals to achieve cleaner air and improved climate regulation.

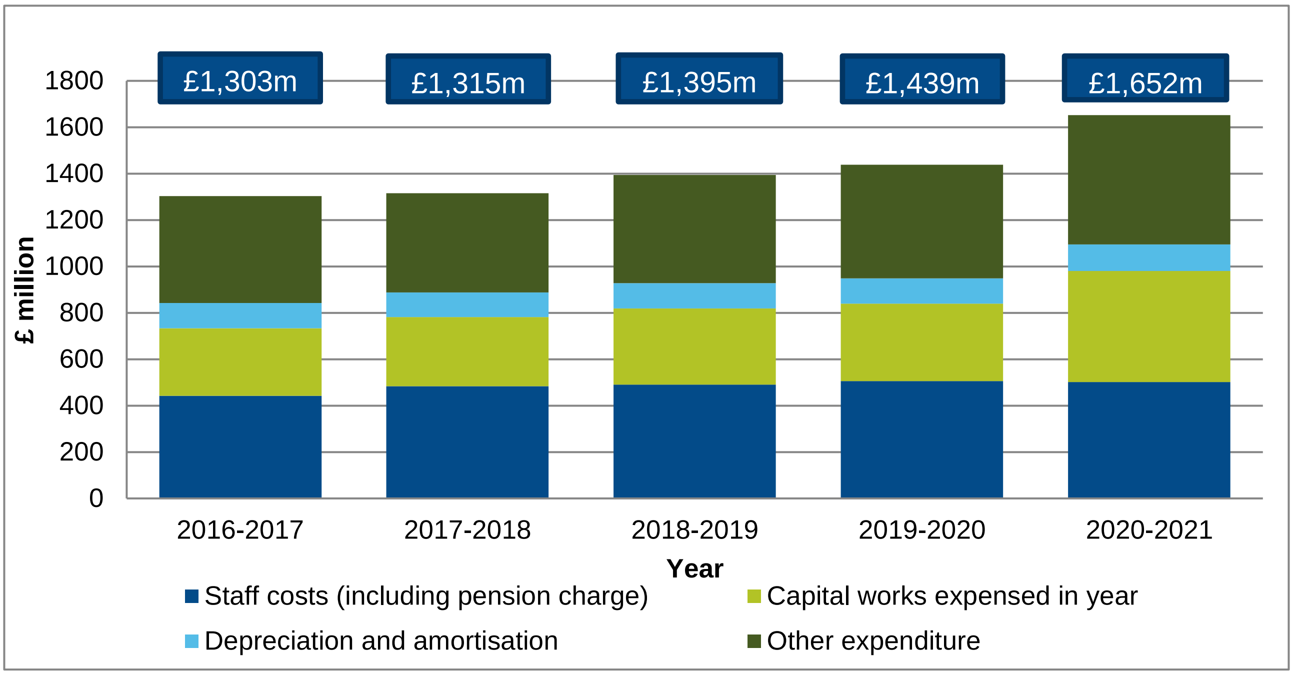


Review of Financial Performance and Funding

Our total gross expenditure for the financial year ended 31 March 2021 was £1,652 million, higher than the £1,439 million in the previous year. Of our total income, 68% came in the form of funding from Defra. The other 32% of income largely came from fees and charges. £7 million of funding from Defra was directly related to EU exit. This was mainly used to assess how EU exit would affect our regulation and work relating to chemicals, fluorinated gas and ozone depleting substances, and environmental land management.

Net expenditure for the year after deducting income was £1,153 million. We are required to treat grant-in-aid cash receipts of £1,050 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: Five-year summary of our expenditure as reported in the financial statements



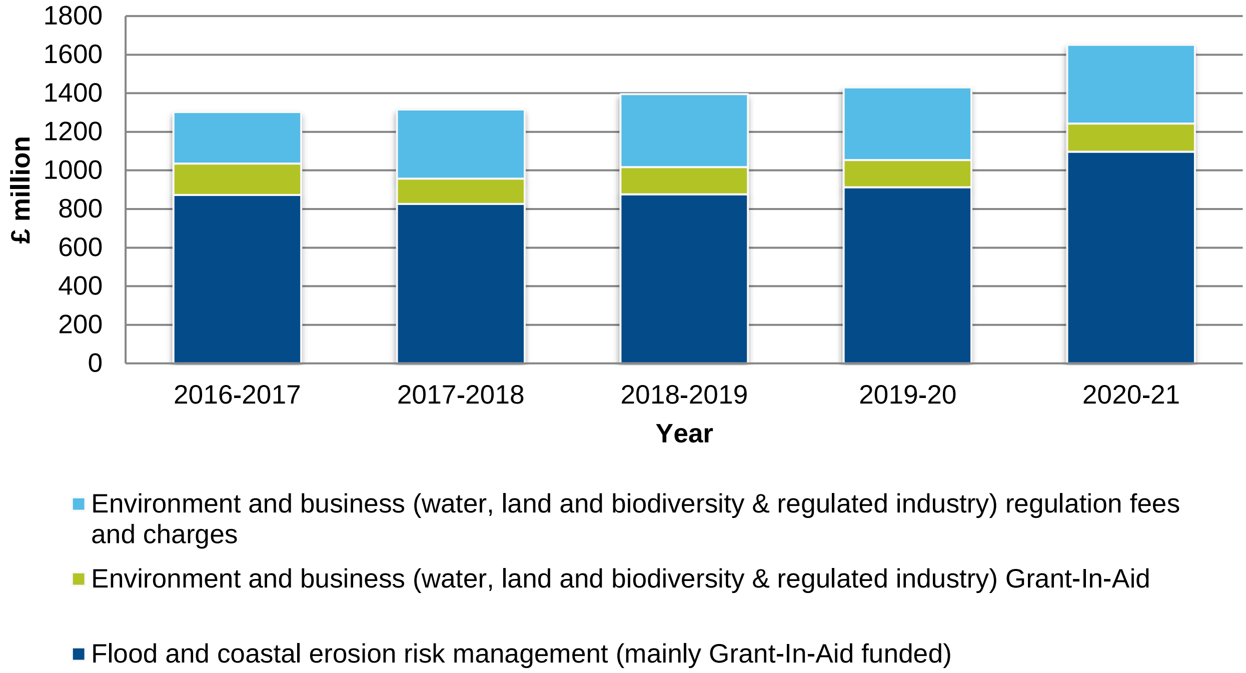
More detail on staff costs, capital works expensed in year and other expenditure is provided in the financial statements in notes 3, 4 and 5 respectively.

Expenditure

Our expenditure by funding stream is shown in figure 2. Environment and business comprise water, land and biodiversity, and regulated industry business areas and is split between fees and charges and grant-in-aid funded work. Further details on fees and charges can be found in table 15 of the Parliamentary Accountability and Audit 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 by Defra each year. This process sets funding for all government departments. The 2020 Spending Review covered solely the 2021-22 financial year, and the Spending Review recently announced in the autumn of 2021 sets resource and capital budgets for three financial years from 2022-23. We receive adjustments to our grant-in-aid funding each year as part of the Defra group planning process.

Figure 2: Expenditure by funding stream



Grant-in-aid has reduced for environment and business and increased for flood and coastal erosion risk management over the past five years. The Parliamentary Accountability and Audit report details the activities funded by fees and charges and grant-in-aid.

Non-current assets

Non-current assets have increased in value by £117 million compared to 31 March 2020. This increase is due to investment in capital assets, such as major flood risk alleviation schemes and revaluation, both net of disposals, depreciation and impairment. The value of our non-current asset base as at 31 March 2021 was £3.4 billion.

We are required to carry out an independent five-yearly revaluation of our freehold land, including operational land, and buildings. A revaluation was carried out in March 2021 and we have used indices to revalue assets not subject to the quinquennial valuation to March 2021 values.

The Financial Reporting Manual requires operational assets which are relatively unique in nature and function to be accounted for at Depreciated Replacement Cost (DRC) to give the most appropriate valuation. Due to the significant logistical and technical challenge, as well as the substantial expenditure, related to the DRC approach when owning as many assets as we do, we currently use a modified historic cost as a proxy for DRC. However, we are in the process of designing a new valuation methodology in response to a qualified audit opinion.

Plant and machinery, furniture and fittings, vehicles and IT equipment are recognised at cost with a suitable index applied in the intervening years.

Going concern

The statement of financial position as at 31 March 2021 shows taxpayers' equity of £1.7 billion (31 March 2020, £2.6 billion (restated)). The reduction is due to an increase in our pension fund liability. The future funding for our liabilities will be primarily grant-in-aid from Defra and other income, mainly from fees and charges. Parliament approves the grant-in-aid funding annually. The fees and charges are statutory and recurring, with the risk of reduced income arising if there is a substantial reduction in economic activity in sectors we regulate.

In 2021-22, 72% of funding is from grant-in-aid and 28% is from other income, based on our opening budgets.

We have received approval for our grant-in-aid resource funding for 2021-22. Our funding for the next three financial years will be agreed as part of Defra's allocation process, following the recent Spending Review 2021 (SR21) settlement.

The Chancellor of the Exchequer on 11 March 2020 announced a government long term commitment to our flood and coastal erosion risk management capital expenditure budget for the six years commencing 2021-22, amounting to £5.2 billion.

We were able to work successfully with charge payers during 2020-21 to maintain the level of collection of billed income at the same level as we received in pre-pandemic years and continue to achieve positive collection levels in 2021-22. While remaining prudent with our assumptions on levels on bad debt, we do not currently have concerns that any increases to bad debt will have a material impact on the Environment Agency's status as a going concern.

We have been prudent with our bad debt assumptions within our budget allocations and will manage our spend through 2021-22 based on our income collection and bad debt experience.

We have prepared these financial statements on a going concern basis.

J.D. Bevan

Sir James Bevan, Chief Executive and Accounting Officer

19th November 2021

Accountability report

The Accountability report consists of the:

- Corporate Governance report – this sets out the Environment Agency's governance arrangements and risk management approach
- Directors' report – this mainly sets out the Board and the executive directors
- Remuneration and Staff report – this highlights the people and pay committee role, executive remuneration and the staff composition of the Environment Agency
- Parliamentary Accountability and Audit report – this covers the main activities of the Environment Agency, information on fees and charges raised, losses and special payments and contingent liabilities

These sections provide key accountability information to Parliament and show the Environment Agency follows corporate governance best practice and norms.

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, Statement of Financial Position, 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's 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 2021, the same as in the previous year. The fee for the statutory audit is £250,000.

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, and relies on his executive directors to support him in delivering his responsibilities.

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 at 31 March 2021, the Chief Executive and eleven independent non-executive Board members, including the Chair, sit 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 twice yearly in Ministerial Performance Meetings, and other Defra ministers regularly on various subjects. This financial year, the topics discussed during ministerial meetings included:

- Water management
- Climate change
- Agriculture
- Fisheries
- Flood risk management
- Helping the country respond to the COVID-19 pandemic
- The Spending Review and the Environment Agency's funding

2.2 Board duties and responsibilities

The Board are responsible for:

- Agreeing strategic direction
- Agreeing objectives, policies and strategies and the performance of executive management
- Agreeing internal governance arrangements and structure
- Controlling and monitoring the financial status of the Environment Agency and its performance
- Ensuring an adequate system of financial and other controls are in place and operating effectively
- Ensuring sound and proper policies in relation to risk management, health and safety and corporate governance are in place
- Ensuring 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 D 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 management 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 four executive directors who provide leadership and strategic direction to the organisation. The four executive directors are responsible for four main directorates:

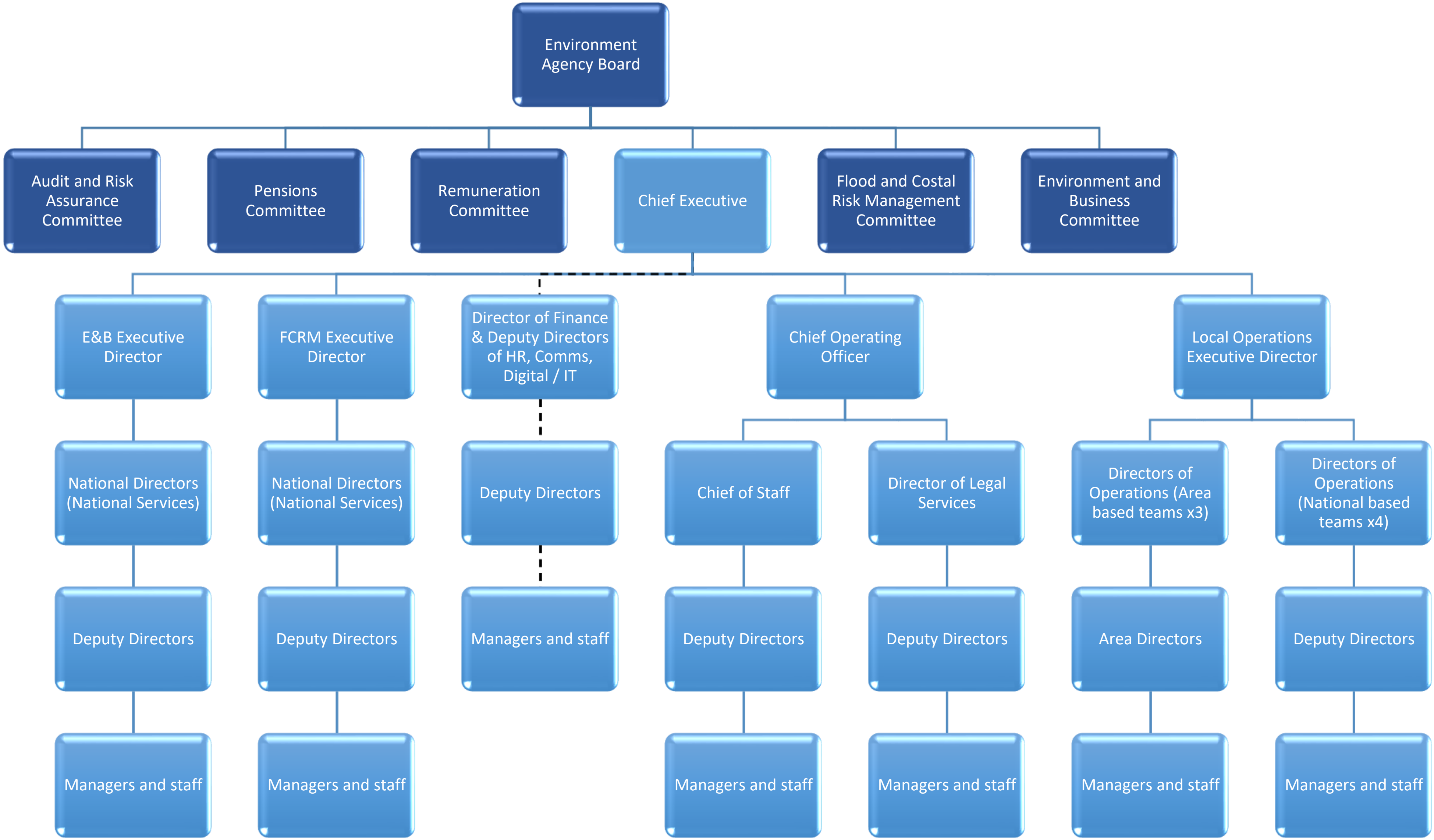
- Flood and Coastal Risk Management
- Environment and Business
- Local Operations
- Chief Operating Officer

The Chief Operating Officer role was created during the year to better balance the leadership of the Environment Agency, and the related directorate is responsible for operational activity that is delivered nationally once, and provision of internal services that support the whole organisation. This includes leading on the relationships with Defra group corporate services.

Typically, the Chief Executive and his team meet twice weekly and for a full day each month to consider and make decisions on managing the Environment Agency. During incidents, including our response to COVID-19, they meet more frequently, as required. 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 lead business partners of Defra group corporate services, which includes the Director of Finance, and Deputy Directors of Communications, Human Resources, and Digital, Data and Technology Services (DDTS), as shown in the chart below. (Defra group corporate services colleagues are represented by a dotted line and lighter shading). In addition, an Equality, Diversity and Inclusion Co-ordinator joins EDT meetings.

Figure 3: Environment Agency organisational reporting lines, including committee board structure



Deputy directors are the primary senior budget managers in the Environment Agency, responsible to their directors and executive directors for the ongoing management of the majority of spend.

2.5 Evolving structures and governance

Management and governance structures continue to evolve to meet changing organisational needs. The Environment Agency has business boards which bring together national and operations directors to ensure national and operational teams work together effectively. This is a key part of the Environment Agency’s internal oversight processes. There are now three business boards – Flood and Coastal Risk Management, Environment and Business, and the Organisational Business Board, the first two boards focusing on specific activity relating to that business area, and they are all supported by portfolio working groups. The Organisation Business Board was established during the year, providing oversight and strategic direction on cross-cutting topics, delivering one-business leadership with representatives from across the Environment Agency.

Each Business Board has a Strategic Outcome Plan which considers what is required to achieve our five-year goals.

Area, national operations and directorate business units use these documents as a framework to write their own Local Outcome Plans where they also have the freedom to include priorities which are unique to their geography or function.

2.6 Defra group corporate services

Governance of the partnership with Defra group corporate services in the Environment Agency now sits with the Environment Agency Corporate Services Portfolio (CSP) which reports into the Organisational Business Board. The CSP brings together senior Environment Agency representatives and the senior corporate services business partners supporting the organisation. The CSP meets every two months and oversees corporate and cross-cutting matters, including the management of risks that require substantial activity or co-ordination by Defra group corporate services. The Partnership Agreement of 2017 between Defra and the Environment Agency remains at the heart of the relationship.

Defra group corporate services and the Environment Agency are committed to working together in partnership to understand areas of challenge and address problems, including strengthening communications to end users through the most effective channels.

2.7 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. 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.

The Environment Agency takes the management of interests and conflicts very seriously. There are robust processes and guidance for managing potential and actual conflicts for our Board members, senior executives and staff. The requirements for Board members are set out in law - specifically the Environment Act 1995. Board members provide updates on declarations at each meeting as a standing item, recorded in the minutes. Board members are required (by the Environment Act 1995) to declare any potential conflicts of interest and to not take part in any deliberation or decision where they have such a conflict, including declaring any conflicts of interest in relation to specific items on the agenda before every meeting that they attend (see note 17.3).

Our procedures and expectations are covered during new Board members’ inductions supported by specific guidance which is issued to all members of the board. We hold a register of board member declarations, which is open to public inspection on gov.uk. The Board's Audit and Risk Assurance Committee (ARAC) review the details of the board and senior executive declarations annually.

2.8 Specific executive measures

Toby Willison, Executive Director for Operations, left the organisation in November 2020. Upon his resignation immediate steps were taken to reduce the risks of conflicts of interest between the Environment Agency and his new employer, who is regulated by the Environment Agency. During his notice period, he no longer took part in regulatory and enforcement discussions and decision making generally concerning water companies and specifically concerning Southern Water. The steps were noted by the Board's Audit and Risk Assurance Committee.

3. Effectiveness of EDT and the Board

EDT held their annual evaluation exercise in August 2020 to review their effectiveness over the year in line with recognised good governance principles and agree focus areas and ways of working for the year ahead.

Based on this evaluation discussion, EDT agreed:

- To continue to focus on discussing strategic items and those that are substantive to our core business, reviewing regularly to ensure EDT remains agile and agrees oversight of any emerging cross-cutting or transformational issues in how the organisation operates
- To build in a requirement for all discussion items to consider the climate emergency and equality, diversity and inclusion
- To continue to triage agenda items to ensure decisions are being made in the right forum
- That the current meeting format, adopted in response to the COVID-19 pandemic, of monthly meetings, supplemented by short fortnightly meetings when needed, should continue as the strategic decision-making forum. Weekly meetings that are both operational and tactical, with no formal decisions being made, will also continue
- To ensure the culture of the organisation assures the delivery of the right outcomes for the country
- To remain agile to the pressure COVID-19 has on the business and staff
- That there is a focus on ensuring robustness around its record keeping and action tracking, and that it is following good practice

The Board opted to delay its full effectiveness review in 2020, in order to focus on and support the organisation's response to and recovery from the COVID-19 pandemic. The Board conducted its most recent effectiveness review in October 2021. The aim was to evaluate its collective effectiveness as a group. The three key areas of focus were: supporting and challenging, strategic focus and engagement. The Board will meet to review and agree the outcomes at their next meeting.

3.1 Data quality

Our data quality approach supports directors in understanding and improving the quality of priority data, as this is the data directors are basing their decisions on.

The Board is satisfied with the quality of the information being used for important decisions. This is based on its own review and use of the data, as well as assurance provided from internal audits during the year. Additional assurance is provided through the conclusions of the NAO, published in the year-end audit completion report, around the data supporting the financial statements. In addition, the Environment Agency has externally audited certification to the ISO9001 (quality management) standard and ISO140001 (environmental quality) standard.

Our accreditation under ISO55001 (asset management) standard requires that we have a data management system suitable for our asset management strategy, plan and outcomes, which enables efficient and effective asset management and risk- based decision making.

Our re-certification audit was conducted between February and March 2020. It did not raise concerns about quality of data.

4. Effectiveness of risk management

4.1 Risk management framework

Our approach to risk management is approved by the Board and executive directors. EDT assesses, prioritises and manages risks throughout the year and individual directors are responsible for the risks within their business area. However, strategic risks or other risks with the potential to disrupt the organisation as a whole are managed by EDT. Executive directors own the corporate risk register. They are responsible for developing, formally reviewing and updating their risk assessments every quarter. Risk management forms a regular agenda item at quarterly meetings during the year. ARAC has an important role in identifying, advising on and monitoring the management of these significant organisational risks.

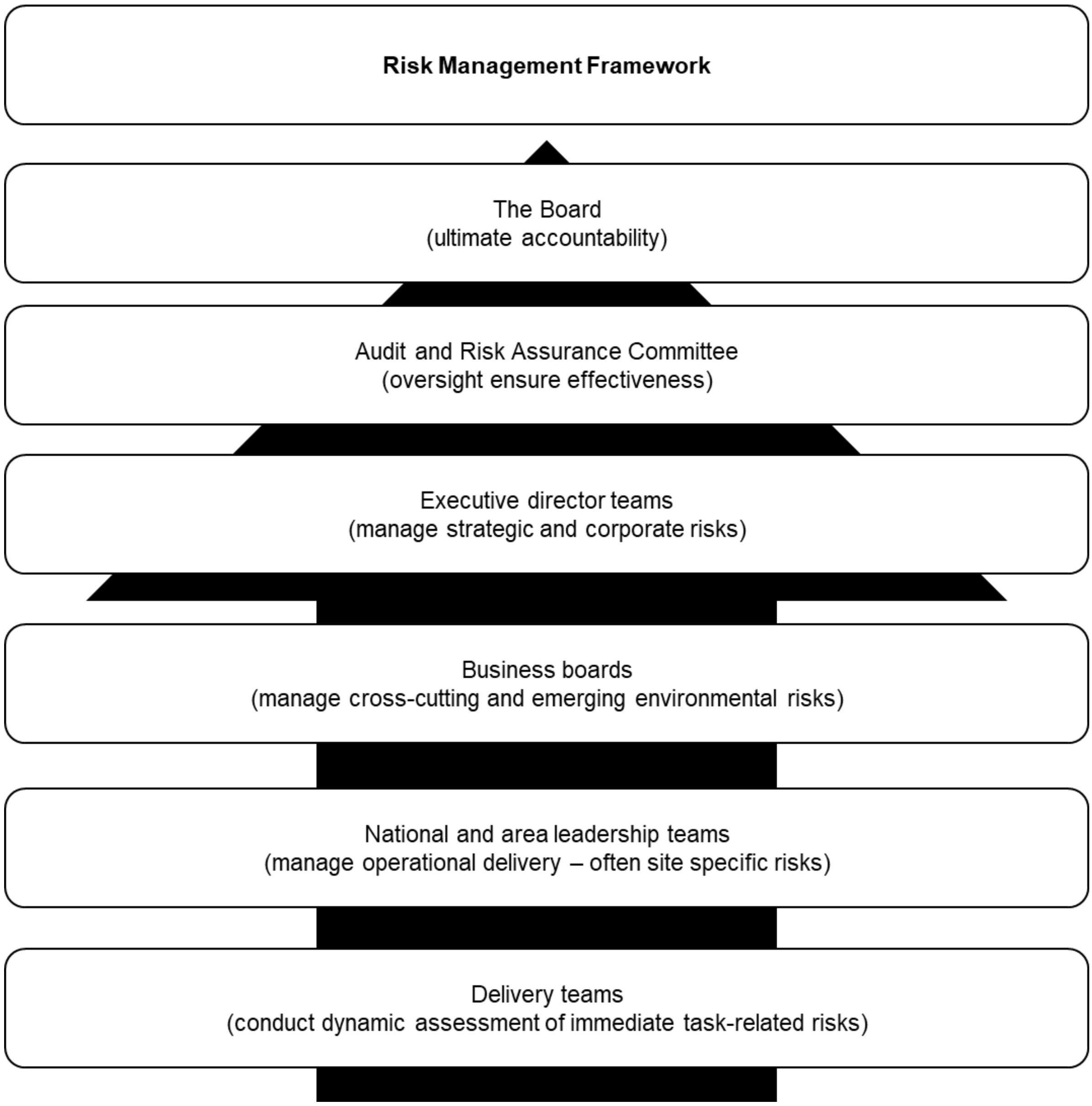
In addition, weekly EDT meetings provide a mechanism to ensure all senior managers are briefed on emerging issues and can respond promptly, including reprioritising and redeploying resources as needed. Where the demands of managing a risk are high or impacts are expected to be significant, the organisation can be moved into incident mode and initiatives such as “stop and slow” can be implemented swiftly to ensure resources are directed to immediate priorities. During 2020-21, these approaches were used successfully to manage the evolving COVID-19 situation, as well as the December 2020 floods.

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.

Many risks, generally those relating to operational activities and that are immediate to short-term in nature, require dynamic assessment. These are managed as part of day-to-day work by team leaders and all employees, who have the ability to “red flag” specific jobs. “Red flags” may be raised on any work activity recognised as posing a danger until proper safety measures can be taken. The consistently low staff turnover in the organisation leads to a high degree of corporate knowledge retention which is an important component of the effectiveness of our risk management framework. Allied with the learning and development programme this provides us with well trained and experienced people with a high degree of corporate discipline, good understanding of our corporate risk appetite, who are well able to exercise their own judgement.

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. Where risks could have a broader impact across the Defra group, or they require wider engagement, they are escalated to the relevant board or committee within Defra and may be referred to the relevant Defra Director General or further escalated to the Defra Executive Committee (ExCo).

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.

We believe our staff are 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 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 each risk.

The Environment Agency's risk management approach is dynamic and can flex according to changes in circumstances. For example, at the start of the 2020-21 financial year the focus shifted to risks associated with the COVID-19 pandemic and it was included on the corporate risk register. In addition to the COVID-19 risk being included on the register, a nine-point strategic plan of risks was produced and a "stop and slow" initiative was introduced for lower priority work and exercises that could be postponed. The light touch annual review of the corporate risk register replacing the Board workshop is an example of the organisation adapting and responding to this revised approach to managing risk.

Changes to the corporate risk register this year have also included the introduction of a risk on water quality to reflect the challenges in achieving the government's objectives for clean and plentiful water. Some risks have been redefined, others expanded, such as staff wellbeing which separately considers the health and safety of our staff.

Having used this approach successfully to manage risks throughout the pandemic the organisation has been able to revert back to the traditional approach of managing risks and those that feature on the corporate risk register are detailed 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, performance targets and budget 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 following element of the Environment Agency's internal control environment help to ensure we deliver value for money:

- 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

- All projects over £100,000 go through an assurance process with review by qualified persons from the appropriate area of expertise using clear investment and appraisal criteria. These individuals are independent of both the proposer and the approver of the expenditure.

- Further 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.

- 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.

A positive and well embedded compliance culture is fundamental to the success of our internal control environment. This is a culture of respecting rules and policies, feeling empowered to challenge more senior people, and doing the right thing.

5.2 Internal 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. 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 approximately 30 business areas in 2020-21. The team reported 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. Those subjects considered in the 2020-21 internal audit report to require specific consideration in the governance statement have been so reported in section 6 on risk management, with the exception of one which does not fall within one of the corporate risks.

Internal Audit noted that the impact of the COVID-19 pandemic and national lockdowns has resulted in a decline in direct regulated activity with the Environment Agency having to adapt to a remote regulated inspection approach. For example, for a substantial portion of the year in the waste sector, the number of physical site visits was approximately 50% of the level completed in the same period in the previous year.

Internal Audit assurance opinions, compared with previous year

	2020-21	2019-20
Substantial	9%	17%
Moderate	64%	52%
Limited	27%	31%
Unsatisfactory	0%	0%

A total of 68 management actions were agreed during 2020-21 to address the issues identified during internal audits. Implementation of management actions is tracked and followed up to ensure that they have been properly implemented by their due dates.

During 2020, we agreed 25 management action deadline extensions where the business had experienced delays primarily due to the pandemic and incident response. However, since January 2021 we have seen a marked reduction in such requests. We currently have 87 management actions to implement, 11 of which are overdue.

Public sector internal audit standards require an external quality assurance (EQA) review of internal audit services to be undertaken at least once every five years. An EQA of the Environment Agency internal audit function was conducted by the chartered institute of internal auditors during the year. The review found that the Environment Agency internal audit function:

- is excellent in its:
  - focus on performance, risk and adding value
  - operating with efficiency
- is good in its application of the internal audit standards
- is satisfactory in its:
  - co-ordinating and maximising assurance; and
  - quality assurance and improvement programme.

The ARAC has noted the results of this review and is satisfied with the quality and value for money delivered by the Environment Agency's internal audit function.

5.3 National Audit Office value for money reviews

The NAO published its report evaluating the government's approach to managing the risks of flooding in November 2020. The report examined whether its current risk management arrangements provide strong and effective oversight, challenge and direction, what government has achieved in the period 2015-2021 and government's preparedness to manage and reduce flood risk when a new expanded investment programme begins in 2021. The report found that the Environment Agency "is on track to meet government's aim to better protect 300,000 homes, has secured more than £500 million of partnership funding to supplement the programme and expects to achieve an estimated benefit–cost ratio across the programme of 8:1 over this period".

It also recommended the Environment Agency should:

- "update and improve its methodology for calculating the risk reduction achieved from its investment programme and, for each year of the new programme, report publicly on annual progress towards reducing risk by 11%

- As part of its annual reporting, report on the geographical distribution of investment, including the impact of changes to the partnership funding model and the amount of investment directed to deprived areas, to provide evidence to Defra to help inform policy decisions and government priorities
- By April 2021, review and update the current approach to communicating with third-party asset owners, develop supporting tools and a communication plan for EA's local area teams to work with third-party asset owners to ensure asset owners are aware of the condition of their assets and of the need for maintenance where required."

The full report can be found online at www.nao.org.uk/wp-content/uploads/2020/11/Managing-flood-risk.pdf

5.4 External accreditation

Recommendations are also made by accredited bodies, who review our environmental performance and quality standards.

In February and March 2020, the external ISO auditors, Société Générale de Surveillance UK Ltd (SGS) conducted a re-certification audit against the revised 2015 version of the international standard for quality management (ISO9001) and the environmental management (ISO14001). This was an in-depth audit, carried out over 30 days and visiting multiple business units. The audit focused on all elements of the ISO standards, particularly the demonstration of leadership and staff awareness of our corporate commitments to internal environmental management and a quality management system.

The re-certification audit coincided with extremely challenging weather and the COVID-19 outbreak. Some visits had to be postponed to enable teams to focus on the winter flood response. The results - only three minor non-conformities raised - were a significant achievement in these circumstances.

The Environment Agency is also accredited under ISO55001 (asset management). In November and December 2019, SGS carried out a surveillance audit for the ISO55001 standard covering the management of our flood risk assets. The audit team confirmed our accreditation and concluded that our management system conformed to the requirements of the standard and was fit for purpose in terms of delivering our asset management policy and objectives. The audit covered several functional processes, including organisation and people, strategy and planning, allocation of resources, risk management, stakeholder engagement and asset information. This focused on making sure that the maintenance of assets was underpinned by asset management data and information. The audit identified three minor non-conformities which are now the subject of an action plan.

6. Significant risks and actions

During 2020-21, EDT have managed a number of corporate risks, with a number of changes in our corporate risk register, including the removal of illegal waste and the addition of water quality and COVID-19 risks. The following risks and concerns were identified through the processes explained above and are being actively managed through detailed action plans, each of which is sponsored by an Executive Director. Each separate risk is introduced with a table summarising how these risks are being managed and whether or not the situation is improving. The key to symbols used to describe the changes in residual risk is given below.

Key		
Increasing risk	Decreasing risk	Risk unchanged
↑	↓	↔

6.1 Climate emergency

Key mitigations	Change in residual risk from 2019-20
Our Climate Ambition – a clear statement of intent Statutory reporting on our climate risks and mitigation Appropriate oversight and governance of delivery and outcome Preparedness for new roles	↔

Against the backdrop of growing global focus on the climate emergency and increasing domestic commitments in the run up to the UK-hosted COP26 in November 2021, the Environment Agency has agreed a single statement of our contribution to tackling the emergency. Our Climate Ambition is to create a net zero nation resilient to climate impacts that will be better for nature, people and the economy. We will focus on preparing for climate impacts whilst also helping to drive down greenhouse gas emissions, including through reducing our carbon emissions to net zero by 2030.

Our commitments fall within all three outcomes in our EA2025 plan and are firmly rooted in our remit as a regulator, advisor and operator. Our initial focus is on using Our Climate Ambition as a tool for internal and external engagement, enabling our staff to describe the journey that we are on and to explore what we can achieve through even stronger collaboration across our organisation and with partners.

We need to match our commitments with action and understand that our credibility as a leader on climate change depends on this. Our Climate Portfolio Board is reviewing what we will need to do differently to make Our Climate Ambition a reality and how we can best hold ourselves to account. Our most significant risks and commitments - managing flood and coastal risk for the country and delivering net zero - already have their own oversight and governance mechanisms. Elsewhere, the climate emergency is very much embedded into our organisation’s work and the focus of our partnership working and we need to think creatively about what we can most effectively measure as an outcome, which is particularly challenging in relation to climate change resilience.

During 2021, we will publish our third Adaptation Report under the Climate Change Act, which will set out our latest assessment of risks posed to our business from a changing climate, and the key actions that are needed to mitigate those risks. We will use this process to share our learning and to be clear where more progress is needed. We have refreshed our corporate scorecard measure on climate preparedness, which now reports on progress against our FCRM strategy action plan as well as our adaptation report.

We also need to make space to work with the government on the emerging net zero policy landscape, where it impacts on our areas of core competency and on the outcomes central to our business. We want to maximise the opportunities for the transition to net zero to also enhance the resilience of the country and to benefit people and the environment. And we must ensure we are well prepared to take on any new regulatory roles that may fall to the Environment Agency. Our role as the UK administrator for the new UK Emissions Trading System is one such example, where we worked closely with government and partner regulators during the negotiations on leaving the EU, to make sure we were ready to issue permits for the scheme start on 1 January 2021.

6.2 Staff wellbeing and health and safety

Key mitigations	Change in residual risk from 2019-20
Staff engagement – webinars/virtual drop-ins Coaching and leadership briefings Shepperton action plan	↑

Staff wellbeing is central to our ability to deliver, and the risk of reduced wellbeing comes from mental as well as physical health.

The tragic death of one of our colleagues while undertaking aerial tree work at Shepperton lock in February 2021, indicated that the health and safety of our people is vulnerable to some organisational, cultural and behavioural factors that have, thus far, been difficult to identify and act upon. The lessons learnt report makes it clear that our processes and delivery methods need to be thoroughly reviewed for this and other similarly hazardous types of work. Following an internal review, we have created an action plan to deliver four key recommendations, with individual deputy directors responsible for leading on specific actions, and a Programme Board to oversee implementation, jointly led by the Chief Operating Officer and Executive Director of Local Operations. The recommendations are that we should:

- Review all our field operations to ensure that the activities we undertake are conducted safely and consider the most appropriate way of delivering more hazardous or specialised work.
- Enhance active monitoring of our operational activities to ensure that we are not allowing “custom and practice” and incorrect perceptions of safety to mask unsafe activities.
- Assess all significant organisational decisions and changes for any potential health and safety impacts.
- Ensure that all our managers have the right span of control to allow them to ensure that all our corporate risk processes are followed.

These actions are being delivered. For example, we immediately paused some activities to quickly assure ourselves that we have the right risk management controls and that they are being followed. Ensuring that the Environment Agency is a safe and healthy place to work is everyone's responsibility. We all need to stay alert, recognise when something might be dangerous, and be prepared to challenge unsafe activities or behaviours. All colleagues have been reminded that they will always have the full support of their line managers if they decide to challenge, pause or "red card" any activity that concerns them and to seek help to make it safe.

The impact of our highest hazard activities will always be significant, should the risks be poorly controlled. However, by completing the Shepperton action plan, together with maintaining our baseline of routine risk management activities, we will reduce the range of high hazard activities that we undertake and ensure that the risks of those remaining activities are better managed than ever before.

Mental health remains the biggest reason for sickness absence, though the overall number of working days lost has dropped. We remain cautious, as a reduction in sickness absence does not always equate to employees feeling better. It could indicate an increase in presenteeism and leavism, where people are working when ill. We are very aware of high stress levels across the organisation and understand that workload is a key contributing factor.

The Health Safety & Wellbeing Service continues doing substantial engagement to try to keep our people as resilient as possible to the negative effects of stress. Sessions included "Wellbeing Question Time" and "Mates in Mind" which were virtual sessions for our Field Operations colleagues – focusing on mental health during the current COVID-19 pandemic.

Our employee assistance programme and occupational health suppliers tell us that due to the pandemic we are likely to see an increase in staff suffering with mental health issues in the year ahead, and the complexity of those issues will undoubtedly be more severe. We have adapted our services to reflect this likely change in demand for support, providing more direct coaching and briefing sessions for leadership teams, as well as adopting the head space wellbeing and mindfulness application in line with the rest of Defra group.

6.3 We secure insufficient funding to meet corporate obligations and objectives

Key mitigations	Change in residual Risk from 2019-20
Challenging to achieve the best possible value for money Developing robust business cases for Spending Reviews Charge scheme proposals Maximising income collection	↑

We have developed a funding plan which sets out what we need to do to fund the goals in the EA2025 action plan. This sets out the actions we will take as an organisation to increase further our charging income; generate a greater commercial income stream; re-focus and increase our external and partnership funding; and generate investments using green finance.

We expected the COVID-19 pandemic to have a material impact on collection of fees and charges income for 2020-21 and beyond as a result of a recession being likely to lead to more bad debts as some businesses we regulate became unable to pay their charges. However, despite not being able to pursue income collection activity for the first four months of 2020-21 we managed to hit our usually targeted full year income collection, and collection levels in 2021-22 remain positive.

We will be consulting in autumn 2021 on our new water resources charges scheme. If we can secure these charge changes, it will enable improved asset condition and regulation to secure future water supplies for the nation.

There has been a long-term substantial reduction in un-ringfenced environment and business grant-in-aid funding since 2010-11, which funds enforcement, incident management, monitoring and planning advice activities. In the one-year Spending Review 2020 (SR20) we received a small increase in such funding for delivering new duties, as well as a small increase in capital funding, to be invested mainly in water assets. The SR20 outcome was confirmation of a substantial increase in FCRM capital funding as part of the new 2021-2027 six-year £5.2 billion capital programme, and a small increase in resource funding.

We understand the context of unprecedented pressure on the public finances and will always do the best we can with the money we have. And we will constantly innovate to do better with less. But, ultimately as a country, we will get the environment we are prepared to pay for. We will therefore be making the case for the level of investment that we believe is necessary to meet the government’s ambitions.

6.4 Asset failure

Key mitigations	Change in residual risk from 2019-20
Asset maintenance and contingency plans Focus on strategically important assets Seek more funding as part of allocations following Spending Review 2021 (SR21) settlement	↔

The Environment Agency owns, operates, and maintains many thousands of assets including the well-known Thames Barrier and other flood risk management assets, air quality and water resources monitoring stations and various temporary flood defence assets such as barriers and pumps. Our assets allow us to control water levels, facilitate navigation, monitor water levels and air quality. To ensure these asset portfolios have effective asset management we have established appropriate governance and created systems including asset registers to identify and prioritise the assets’ critical role in terms of infrastructure or community benefit. This asset data and information enables the establishment and delivery of inspection regimes for all asset classes, including appropriate monitoring, assessment, and repair.

Internal audits have led to an overall recommendation to ensure that there is a standard risk-based approach to asset management for all types of assets, including inspections, maintenance, remedial work and the collection, recording and sharing of associated management information.

All of the asset portfolios have programmes and plans in place that ensure they are regularly inspected, maintained on a risk priority basis, and will reliably provide the function they have been designed for. This forms part of the risk-based asset management assurance plan which includes, particularly in the case of strategically important assets, the implementation and review of asset contingency plans for if the asset is overwhelmed or not able to operate as expected, so that the asset function can still be delivered after the incident or flood has ended. If such an asset and its relevant contingency plan both fail this could have a significant impact on the lives and livelihoods of the local community. This is one of the reasons that the new Flood and Coastal Erosion Risk Management (FCERM) strategy has climate resilient places, infrastructure to be resilient in tomorrow's climate and climate champions as part of its objectives. A new Asset Management Strategy is being developed for implementation in September 2021, which will align with the objectives of the FCERM strategy and enable an improved delivery plan. There is now a risk sub-group to the Asset Management Strategy Portfolio Board to lead governance of asset failure and other related risks.

Asset condition has been falling over the last two years for FCRM high consequence assets. The level is now at 94.5% of such assets being at their required condition, the lowest since we began recording asset condition in the current format in 2009 and below our target of 98%. The main reasons for falling asset condition are repeated flood incidents since autumn of 2019 resulting in asset damage and, in some isolated cases, asset failure. We also have new evidence that assets are deteriorating quicker, most likely as a result of the extremes of weather patterns, requiring greater levels of inspection, maintenance and repair. The risk of asset failure increases when there is a greater number of assets below required condition and when assets are in poor condition. To address this, we are undertaking the following:

- Asset recovery programme – using additional funding to repair assets damaged during floods over the last two years
- Inspecting all assets impacted by the floods – this was hampered by COVID-19 restrictions, but we are back on programme
- Mitigation and contingency plans to reduce the risk of asset failure while waiting for repair

To return assets to the required condition requires further funding over a longer term. We will be submitting our funding needs to achieve this as part of Defra's allocation process following the Spending Review 2021 (SR21) settlement.

6.5 Water quality

Key mitigations	Change in residual risk from 2019-20
Water ambition – changing our approach to water management Telling the story around key issues such as storm overflows Being open and transparent about our performance	New risk for 2020-21

There are high public and political expectations of the Environment Agency on addressing the issue of poor water quality. Our Water Framework Directive classification results have not improved since 2016 and remain at 16% of waterbodies classified as having good or high ecological status. As we understand more about our water environment and adapt to a changing climate, the gap between our current activities and what we need to achieve is widening.

There is a growing level of media and political interest in water, and the public expectation of water quality is increasing, influenced partly by the popularity of activities such as open water swimming. The general public understanding of water infrastructure is low. We need to ensure that the public are aware of the issues as a platform to engaging wider action.

We need a step change and collaborative approach to water management, which needs to be government led and underpinned by regulation. Businesses also need to be engaged – farmers and water companies in particular. We also need to engage communities to understand the value of water through a campaign of "re-thinking water".

We also need to focus on being transparent about our performance. This includes supporting the farming industry with the new Environmental Land Management Scheme and expanding our monitoring and regulation.

6.6 Security

Key mitigations	Change in residual risk from 2019-20
Clear understanding with Defra group corporates services on our respective responsibilities Ensuring high levels of staff awareness of security risks	

Failures in security could impact on our people or assets, including information, so that we are unable to deliver some or all of our objectives and statutory duties.

The Environment Agency is working with DDTS to understand our exposure to cyber-security risks and the efficacy of our response plans, to reflect the changing external threat environment. Although the Environment Agency retains accountability for our security management and business capability, we are reliant on Defra Corporate Services for most of the practical mitigation measures that might be implemented.

The Environment Agency are working with Defra group Security to seek funding for broader security risks as well as to prioritise the assessment of critical assets, and identify actions needed to address any issues. We need to achieve a successful allocation following the Spending review 2021 (SR21) settlement for Defra group, as well as in further spending rounds, to keep pace with the changing security risk landscape. The Environment Agency will also be identifying where security specific funding is required on non-IT assets.

The Environment Agency and Defra group Security have started work to clarify governance and decision making on security matters, seeking to meet both EA legal accountabilities and broader, group-wide considerations.

6.7 Corporate IT

Key mitigations	Change in residual risk from 2019-20
Impacts to the business are being managed through the IT, Data and Systems portfolio and its delivery group Bid for funding to update legacy IT systems	

An aging and increasingly end-of-life EA and Defra IT estate could result in failure of essential IT systems and services and significant business impacts during modernisation, impacting the Environment Agency's ability to deliver its outcomes.

A Defra group internal audit concluded that while Defra's approach to managing legacy IT and technical debt is considered sound, it could be improved by carrying out a holistic risk impact assessment across the large legacy estate, including a full end to end understanding of operational and security vulnerabilities. The audit also concluded that roles and responsibilities in relation to funding also need to be clarified and communication and engagement with arm's length bodies such as the Environment Agency needs to be improved.

During 2020-21, DDTS delivered a substantial, and on-going, programme of modernisation, alongside EA-led initiatives. The resulting level and pace of IT change has put additional pressure on the Environment Agency and presents additional risks to the organisation. In the meantime, the Environment Agency continues to be exposed to the risk that end-of-life systems impact our ability to deliver environmental outcomes and respond to incidents.

The Environment Agency is managing the impacts to the business through the IT, Data and Systems portfolio which reports into the Organisational Business Board. The programme is taking an iterative approach to understand what is needed and significant progress has been made. However, the extent of the changes is diverting resource from EA work and there is continued reliance on the legacy, out of support systems.

There are also gaps in how we manage IT that is unsupported by DDTS, and ownership of Corporate IT. An IT Delivery Group is working to address this tactically to support the work planned over 2021-22. Further work will focus on longer term considerations.

The IT risk will not be addressed in a single year, but rather will require an on-going programme of modernisation of both DDTS and EA line of business IT and associated ways of working. Shortfalls in Spending Review 2020 (SR20) funding mean a number of important DDTS initiatives were cancelled or delayed. Our ability to mitigate the ever-increasing risks of our technical debt and deliver transformational change will be determined by the Environment Agency's allocation of the recent Spending Review 2021 (SR21) settlement for Defra group.

7. Ministerial Directions

The Environment Agency received no Ministerial Directions during 2020-21.

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

We pay grants to local authorities, 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 require 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 account. The project completion form demonstrates how the aims of the project were met and is reviewed and approved by the Area Flood and Coastal Risk 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 provided grants to civil society groups and charities for work delivering Water Framework Directive objectives. In 2020-21, grants were made available to each catchment partnership to support the maintenance of partnerships across England's catchments to deliver a catchment-based approach to water, land and flood management. These host organisations were selected following an open bidding process as part of setting up the original Catchment Restoration Fund in 2013. The grant manager for the fund is responsible for its assurance. We require summary reports each year to ensure that hosting and capacity building has been delivered within the financial year.

Since 2017, we have administered Catchment and Natural Flood Management Partnership Grants on behalf of Defra under section 70 of the Charities Act 2006. Catchment Partnership Grants 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 aim to better understand and evidence the use of natural flood management techniques in reducing flood risk, promoting biodiversity, and improving habitats by working in partnership. Two additional partnership grants programmes were administered during 2020-21 for tree planting and peatland restoration projects.

We manage all our programmes in accordance with guidance from Cabinet Office Grant Standards.

9. Data security

The Environment Agency's Data Protection Officer, data protection practitioners and legal advisors are available to provide advice and guidance to all staff across the organisation and to respond to customer enquiries where necessary. New and updated policies and compliance tools are published throughout the year, supported by staff training and awareness-raising.

In 2020-21, we reported one breach of the data protection legislation to the Information Commissioner's Office (ICO) which regulates the legislation.

An incorrectly redacted document was sent to a recipient in response to a request under the Environmental Information Regulations. Personal data involved included basic contact details and comments of approximately 20 members of the public relating to a regulated site. The ICO concluded no further action was necessary in respect of the incident.

10. Public correspondence

Correspondence from the public is detailed below and are based on those recorded and subsequently reported from our National Tracker.

Freedom of Information (FOI) requests received in 2020-21 total 42,059 (2019-20, 43,767), a reduction of 1,708 (4%). The average response rate for FOI requests was 29 days but taking out an anomaly of reported data for one area, reduces to 16 days, against an average response rate of 11 days in 2019-20. The ICO requirement for FOI responses is 20 working days. When reporting the overall compliance rate to this 20-day target, and whilst there are six months' worth of data for 2019-20 (96% and 94%), the monitoring of compliance for 2020-21 was suspended in order to support our ways of working during the COVID-19 period. With that said, the average number of days taken to respond, can be used as an indicator of performance for this year.

Executive correspondence (both CEO and Chair enquiries) received in 2020-21 total 796 (2019-20, 714), an increase of 82 (11%). The top three issues raised to our executive team through these enquiries were Flood and Coastal Risk Management (FCRM), waste management and planning and development. Compliance to our own internal standards for response rates was 557 (70%) (including those allocated a 10 day response time, and those allocated a 20 day response time) compared to 493 (69%) in 2019-20.

Complaints received in 2020-21 total 2,303 (2019-20, 1,957), an increase of 346 (18%). The top three areas of complaint were FCRM, waste management and navigation. Compliance to our own internal standards for response rates, was 2,003 complaints (87%), (2019-20, 1,389, 71%). It is worth noting that for 2019-20 the target response rate was 10 working days, and was extended to 20 working days throughout 2020-21, to support our ways of working through the COVID-19 period.

Commendations received in 2020-21 total 305 (2019-20, 372) a reduction of 67 (18%).

11. Parliamentary Ombudsman

The Environment Agency moved to a two-stage complaints process early in 2019. This included an independent review stage for the most complex of cases. Once our complaints process, which is published on the gov.uk website, has been exhausted, customers are advised they can refer their complaint to the Ombudsman if they remain dissatisfied. We have enjoyed an excellent working relationship with the Parliamentary and Health Service Ombudsman for many years, but the COVID-19 pandemic had a marked effect on the number of enquiries received in 2020-21. As we moved into 2021-22 and the Ombudsman began accepting new cases, activity levels increased.

Our work with the Ombudsman was protected throughout the pandemic but overall, business was relatively quiet. In 2020-21, three complaints were accepted for investigation and three other investigations were completed. Of those, none were upheld; one was partly upheld (and we complied with the recommendation); and two were not upheld.

By way of comparison, in 2019-20 one complaint was accepted for investigation and one other partly upheld investigation was completed (and we complied with the recommendation).

We take active steps to circulate a digest from Ombudsman cases to the business so we can learn lessons from the cases which the Ombudsman investigates.

In the last three months of 2020-21, the government established the Interim Environmental Governance Secretariat (IEGS), as the precursor to the Office for Environmental Protection (OEP), to be established as part of the Environment Act. On the basis that complainants can escalate complaints about the Environment Agency, specifically about environmental law, to the OEP (via the IEGS) one complaint was made to the IEGS in 2020-21. This was managed within given timeframes, and whilst we have maintained that the complaint is out of scope (against the specific criteria set out by the IEGS), we await a decision from the OEP about whether they will be taking the complaint further once they are established.

12. Whistleblowing

12.1 Internal whistleblowing

Our 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 and our suppliers and contractors 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 November 2020 about our approach to whistleblowing, including how they can and should raise concerns in confidence.

All concerns raised under our policy were carefully considered and investigated. During the year, management action was taken in both upheld and unsubstantiated cases including improved guidance, improved processes and reinforced best practice in the workplace.

12.2 External whistleblowing: 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 directly to us for environmental concerns.

In September 2020, we published our third annual report into external whistleblowing. We received eight qualifying disclosures between 1 April 2019 and 31 March 2020. Most disclosures were anonymous. Some of the disclosures were made by employees wishing to make qualifying disclosures about their employers or other third parties.

Our reports describe each of the cases reported to us and what action we took in consequence. They are available on the gov.uk website and can be found here:
https://www.gov.uk/government/publications/whistleblowing-annual-reports

Further, if someone submits an Employment Tribunal claim including whistleblowing against their employer (or former employer) and that claim relates to environmental malpractice, under a separate set of regulations, the Employment Tribunal is required to share the claim form with us so that we can take any necessary action.

13. Fraud risk management

Our Director of Legal Services, working 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 Financial Control 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. The Cabinet Office provided feedback on our levels of compliance with the standard in 2019-20, but not as yet in 2020-21. They rated our performance as amber, noting two areas in which we could improve our performance:

- By developing a better understanding of our residual fraud risks
- By renewing our counter fraud strategy

Since then, we have prioritised the development of our understanding of residual fraud risks.

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

Other counter fraud activity has centred on investigations continuing despite the COVID-19 pandemic and communications with leadership teams and staff, increasing awareness through roll-out of training to new managers and ad hoc communications on specific issues.

Excluding thefts by third parties (where no employee involvement is suspected), and prosecutions offences where we are the regulator, during 2020-21, we identified 50 potentially fraudulent incidents. Of these, 40 were found on balance of probabilities to have been fraudulent in some way. The majority, 33, were the result of third parties abusing employees' charge cards or mandate frauds.

Of the remaining seven, five were committed by external third parties and included, for example, a supplier's email being hacked to change banking details (prevented fraud).

The two cases involving employees were: an internal theft where it has not been possible to identify the culprit and a member of staff conducting an undeclared job while working for the Environment Agency.

The relatively small number of potentially fraudulent incidents identified makes it difficult to establish any real trends and small changes in numbers cannot be taken as either a real indicator of increases or decreases in fraud but one thing the analysis above does suggest is that our investigations are doing more to recognise incidents or behaviours which result in significant action. Disciplinary action taken where fraud is found includes dismissal.

14. Money laundering reporting and compliance

Money laundering is a real (if low likelihood) risk for the Environment Agency.

The Director of Legal Services is the appointed Anti-Money Laundering Compliance and Anti-Money Laundering Reporting Officer (MLRO) for the organisation on behalf of the Accounting Officer and is supported by a senior lawyer as Deputy Money Laundering Reporting Officer (DMLRO).

For teams with activities which include risks of money laundering, we have familiarised key team members and role holders about the risks in Environment Agency business and have an established reporting process for bringing suspicious transactions to the MLRO's attention. We have also ensured that staff are aware that it is an offence to "tip off" a party to a transaction who is suspected of money laundering, for which they too can be prosecuted individually.

Where a transaction does raise suspicions of money laundering, the MLRO reports this information to the National Crime Agency (NCA) using a special reporting mechanism called Suspicious Activity Reports (known as SARs). These SARs help the NCA and others who can access its database in their wider investigations across the law enforcement community. The NCA consider this report and determine whether the transaction can be allowed to go ahead. We have not needed to report any SARs during 2020-21 to the NCA.

It is an offence for the organisation to enter into an arrangement which facilitates money laundering for which the MLRO and DMLRO have a potential for personal criminal liability.

15. Modern slavery

In 2018, the Environment Agency made a public commitment to join the fight against modern slavery. Figures from the anti-slavery charity, Hope for Justice, show that two-thirds of victims they work with are reported to have worked within the waste industry, making this one of the key areas we are most likely to interface with modern day slavery.

Whilst the majority of the waste businesses we regulate are well run, there are some operators who delve into criminal practices which harm the environment, local communities and their own workforce.

As part of delivering on this commitment we:

- Routinely pass intelligence to the police where we suspect modern day slavery may be taking place on sites we visit
- Take part in multi-agency days of action with the police and other partners to disrupt criminality including MDS at sites who are operating illegally
- Frequently work with partners to raise the profile and awareness of modern-day slavery

Every year we spend £805 million with suppliers, about 50% of our total operating costs. Addressing the modern slavery and wider human rights impacts associated with purchases is a core and embedded part of our approach and has been for over 16 years. We prioritise the work we do with supply markets and suppliers based on sustainability impacts, business risk and spend so that we can focus our efforts in the highest risk areas. A sustainability risk assessment which includes human rights is completed as part of commercial strategies to determine which impacts are relevant to the contract and how they will be managed throughout procurement and for the entire life of the contract. We continue to focus efforts on high-risk categories including but not limited to construction, IT, waste management, personal protective equipment and clothing. We embed requirements within contracts including the International Labour Organisation's standards, assessing and working with suppliers to reduce the risks. Our recently launched corporate sustainability plan eMission 2030 commits to protecting people from modern slavery and we will continue to develop our approach to the management of the risk working with our suppliers.

The Environment Agency are working with Defra in developing a joint Modern Slavery Statement for publication in 2021 as per requirements under section 54 (Transparency in Supply Chains) of the Modern Slavery Act 2015.

16. NAO qualification of opinion on property, plant and equipment valuation

In 2019-20 the National Audit Office (NAO) raised a qualification on operational asset balances on the basis that these were not valued using a Depreciated Replacement Cost (DRC) approach. A longstanding approach that was considered a cost-effective proxy for DRC has been applied since 1996. More information on this is available in the 2019-20 annual report and accounts. We are working to deliver a DRC valuation which is a considerable task with 8,000 operational assets and the requirement for specialist valuation skills. It will therefore not be possible to achieve this outcome until the end of the 2022-23 financial year. This means the NAO qualification on this matter remains for the 2020-21 accounts and will also for the 2021-22 accounts.

In 2020-21 the NAO has expanded its qualification on the reported values of property, plant and equipment (PPE) to include components other than operational assets, which represent 85% of the 31 March 2021 net book value of PPE. This widening of the NAO qualification on asset values is due to issues with the quinquennial revaluation of land and buildings.

Environment Agency quinquennial property valuations are complex, given the scale of the number of property assets. In normal circumstances delivering the property valuation is challenging. In 2020-21 the finance function was very stretched as a result of the 2019-20 audit which only completed in December as a consequence of the February 2020 floods followed by the impact of the COVID-19 pandemic on the Environment Agency. This meant there was not the necessary level of internal control between Finance and Estates over data quality and instructions to external valuers. This exacerbated shortcomings in the data quality of the fixed asset register.

We plan to improve the property assets data in the fixed asset register and move to a series of annual property asset valuations, delivered by RICS qualified valuers, which will deliver the same coverage of all assets within a given five-year period. This will be easier to manage and reduce the risk of errors with a large one-off quinquennial valuation.

16.1 NAO report on other audit findings

The NAO identified some data quality issues in fixed asset records, while also recognising that substantial work has been completed in this area from the previous year. An ongoing project is in place to continue to improve the data quality to an appropriate level and will include applying suitable controls to ensure capitalisation of expenditure is appropriate.

16.2 Timescales for audit completion

The time taken to complete the audit for the 2019-20 and 2020-21 financial years has been far greater than previous years. For the decade prior to 2019-20 the Agency accounts were all laid in parliament prior to the summer parliamentary recess. The reasons for the 2019-20 audit completion delay are mentioned above. In 2020-21 a combination of factors also severely impacted the time to complete the audit. This is due to the NAO needing to expand testing as a result of the 2019-20 audit findings and staff absence as a result of COVID-19. We are committed to working with the NAO to seek to deliver earlier audit completion and laying of accounts for future years.

17. Reservoir Operating Agreements – Prior Period Restatement

The prior year accounts have been restated to reflect changes to opening positions relating to the Environment Agency’s Reservoir Operating Agreement financial liabilities which arose from water privatisation in 1989. In 2020-21, we performed an in-depth reassessment of accounting policies connected to Reservoir Operating Agreements and agreed with the NAO that the full value of commitments to inflation proof our payments to water companies would need to be reflected in the valuation of the liability and retrospectively applied.

The liabilities and associated interest costs have therefore been restated to reflect the revised accounting treatment in each of the years since inception of the agreements in 1989. The impact of this change on the financial liability has been an increase of £263 million to the figures previously reported in 2019-20. The finance charge for 2019-20 recognised in the Statement of Comprehensive Net Expenditure increased by £8 million (note 5.3).

Directors' report

Board and Executive Directors

We employ four 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 2020-21.

Pensions

We are a statutory member of the Local Government Pension Scheme (LGPS). We are the administering and employing authority for the Environment Agency Pension Fund (EAPF) an active fund known as the “Active Fund”. EAPF was created in 1989 for employees of the National Rivers Authority. It now provides defined benefit pension benefits to nearly 27,000 people, who are current and former employees of the Environment Agency, Natural Resources Wales and Shared Services Connected Limited (SSCL). For the financial year 2020-21, the Active Fund received contributions equivalent to 19% from the Environment Agency and between 5.5% and 12.5% from its employees. £31 million of advanced employer contributions were also paid to the Active Fund for 2021-22 and 2022-23.

Every three years, the Active Fund undertakes a valuation in conjunction with the Scheme Actuary. Our 31 March 2019 valuation assessed the Active Fund’s financial position with a funding level of 106% (2016,103%). Investment returns on the Active Fund’s assets between 31 March 2016 and 31 March 2019 were 36% and increased the assets’ value by £960 million. The 2019 valuation was positive with the Active Fund reporting an improvement in funding over the preceding three years, driven by asset outperformance. The estimated funding level increased as of 31 March 2021 to 111% (2020, 100%), with the Active Fund’s assets growing by an impressive £680 million on the prior year.

There is a real recognition that Responsible Investment Funds have outperformed during the global pandemic which have helped to protect the Active Fund’s value. It must be remembered that the Active Fund employers are able to take a long-term outlook when considering the high-level funding implications of external shocks. No one knows what the long-term impact of COVID-19 may be on the economy and ultimately on the long-term cost of funding defined benefit pensions. The EAPF continues to monitor the funding level and outlook for the long-term economy and returns on the Active Fund’s assets on a regular basis but will not need to revisit contribution rates for long term employers at this stage. As reported in the Environment Agency Pension Fund annual report, the actuaries believe the pandemic will also sadly have a more real impact on the Active Funds’ members, with mortality rates over the period to the 2022 valuation likely to be higher than in previous years. It will take time for this to be properly understood and the impact will likely not be reflected until this next actuarial valuation.

The 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 considered throughout the funding and investment decision making process.

The Government introduced regulations in 2016 which require LGPS Funds to pool investments to improve efficiency. Brunel Pension Partnership Ltd (Brunel), was created and became operational from 1 April 2018. It comprises the EAPF and nine 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 to, the administration of the Active Fund which is carried out by Capita Pensions Solutions.

The EAPF has a communication policy which identifies the Active Fund's key stakeholders, and how we communicate with our different categories of members. The Active 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 Active Fund's communication strategy. Information can be found at https://www.eapf.org.uk/

In autumn 2020, the EAPF was recognised as a global leader in responsible investing by the Principles for Responsible Investing (PRI) for the second year running.

In December 2020, the EAPF won "The Best Pension Fund in the United Kingdom" at the IPE Awards 2020. IPE is Europe's premier pensions website. The judges commented "This fund should be applauded, with strong performance figures, backed by a proactive, efficient and innovative response to the pandemic, whilst keeping focus on environment, social and governance issues and the views of its members".

We also won the 'Best approach to Sustainable Investment' at the LAPF awards. LAPF Investments is the magazine for local authority pension investment specialists.

We are also the statutory administering authority for the Environmental Agency Closed Pension Fund, an inactive fund known as 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 Closed 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 86% of invoices from suppliers within ten days of receipt and registration, compared to 83% in the previous year. Creditor days, calculated on an average basis for the year, were three days during 2020-21 (2019-20, five days).

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. In 2020-21, we recorded £5m research and development expenditure in addition to the elements within the Capital Works Expensed in Year note (Note 4) relating to catchment flood management plans, flood risk management strategies and flood mapping.

Remuneration and Staff report

(Subject to audit)

The People and Pay Committee

The People and Pay Committee comprises five 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 2020-21 the Committee's terms of reference were as follows:

1. The People and Pay 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 People and Pay Committee will consider and advise the Environment Agency Board generally on matters relating to human resources.

3. The People and Pay Committee will:

- Consider and approve the overall remuneration strategy of the Environment Agency from the employees' perspective including the full benefits package
- Consider and approve periodic pay reviews for Environment Agency employees
- Consider and approve any significant policy issues involving terms and conditions other than pay
- 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
- Set and review all aspects of the objectives and remuneration of the Chief Executive
- Review the framework for succession planning for key posts
- Receive an annual statement of expenses incurred by Board members
- 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 People and Pay Committee should make a report on People and Pay Committee business to the Board meeting following each People and Pay Committee meeting. The full minutes and papers of the People and Pay Committee meetings are made available to any Board member on request.

The People and Pay Committee met five times during the financial year ended 31 March 2021. 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

- Executive directors’ Team structure and Chief Executive and executive directors' pay
- The work of the committee and planned work for next year
- The Board’s own expenses
- Gender pay gap
- The Race Action Plan
- Employee relations

Under section 1 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 four 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	30 Nov 2015 – present
Executive Director of Operations	Toby Willison	1 Apr 2015 – 25 Nov 2020
Executive Director of Environment and Business	Harvey Bradshaw	26 Sept 2015 – present
Executive Director of Flood and Coastal Erosion Risk Management	John Curtin	19 Sept 2015 – 30 November 2020
Executive Director of Flood and Coastal Erosion Risk Management (interim)	Catherine Fileman-Wright	1 December 2020 – 31 March 2021
Executive Director of Local Operations	John Curtin	1 December 2020 – present
Executive Director Chief Operating Officer	Lucy Hunt	1 December 2020 – present

The Chief Operating Officer is a new Executive Director role created during the 2020-21 year to provide a more balanced senior leadership for the Environment Agency. The notice period for executive directors is at least three months and the policy for their remuneration is the responsibility of the People and Pay Committee.

Board members' remunerations (audited)

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

Board member	Subcommittee member	Latest date of appointment or re-appointment	Period of appointment (months)	Latest time commitment (days)	Remuneration in 2020-21 (£)	Remuneration in 2019-20 (£)
Emma Howard Boyd (Chair)	PC, PCISC, PPC	19 Sept 2019	36	3 per week	100,000	100,000
Richard Macdonald (Deputy Chair) (i) (iv)	ARAC, PPC, FCRM	1 Dec 2020	4	5 per month	25,201	25,201
Maria Adebowale-Schwarte	PPC, EB	1 July 2019	36	5 per month	21,002	19,952
Judith Batchelar (iv)	ARAC, EB	1 April 2018	36	4 per month	16,800	16,800
Lynne Frostick (iii, iv)	FCRM	16 Mar 2021	4	6 per month	25,056	25,200
Robert Gould (ii), (iv)	ARAC, FCRM, PC, PCISC, PPC	31 Jan 2021	2	5 per month	21,002	21,002
John Lelliott (ii), (iv)	ARAC, FCRM, PC	31 Jan 2021	2	5 per month	21,002	18,551
Caroline Mason (iv)	PC, PCISC, EB	1 April 2018	36	4 per month	16,800	16,800
John Varley (v)	EB	1 Oct 2020	6	3 per month	12,597	12,597
Gill Weeks (vi)	ARAC, EB, PPC	8 Sept 2020	6	5 per month	19,655	21,002
Stewart Davies (vii)	ARAC, PPC, EB	1 Feb 2021	48	4 per month	2,800	-
Ines Faden da Silva (vii)	ARAC, FCRM	1 Feb 2021	48	4 per month	2,800	-
Lilli Matson (vii)	FCRM	1 Feb 2021	48	4 per month	2,800	-
Total					**287,515**	**277,105**

Details of the attendance of Board members are provided in Appendix D. 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 2021

PC – Member of Pensions Committee at 31 March 2021

PCISC – Member of Pensions Investment Sub Committee at 31 March 2021

FCRM – Member of Flood and Coastal Risk Management Committee at 31 March 2021

EB – Member of Environment and Business Committee at 31 March 2021

PPC – Member of People and Pay Committee at 31 March 2021

Notes:

i. Richard Macdonald's term was extended by 6 months effective from 1 June 2020, and subsequently extended by a further 4 months from 1 December 2020.
ii. Robert Gould and John Lelliott's terms were extended by 2 months effective from 31 January 2021.
iii. Lynne Frostick's term was extended by 4 months effective from 16 March 2021
iv. Richard Macdonald, Lynne Frostick, Robert Gould, John Lelliott, Caroline Mason and Judith Batchelar continued in their roles beyond 1 April 2021 whilst formal extension terms were agreed.
v. John Varley's term was extended by 6 months from 1 October 2020 and ended on 31 March 2021 with no further extensions.
vi. Gill Weeks' term was extended by 6 months from 8 September 2020 and ended on 7 March 2021 with no further extensions. Her full year equivalent pay was £21,002
vii. Stewart Davies, Ines Faden da Silva and Lilli Matson were appointed from 1 February 2021. Their full year equivalent pay was £16,800.

Executive directors’ emoluments (audited)

Table 3: Total emoluments and benefits in kind of executive directors in the last two financial years

Executive Director	Emoluments (£5,000 banded range)		Performance related pay (£5,000 banded range)		Benefits in kind (to nearest £100)		Pension benefits (to nearest £)		Total (£000 banded range)	
	2020-21	2019-20	2020-21	2019-20	2020-21	2019-20	2020-21	2019-20	**2020-21**	**2019-20**
Sir James Bevan (i)	185-190	185-190	-	-	-	-	27,945	10,199	**215-220**	**195-200**
Toby Willison (ii)	100-105	150-155	-	15-20	-	-	(2,275)	19,002	**95-100**	**185-190**
Harvey Bradshaw	140-145	140-145	-	-	-	-	-	20,781	**140-145**	**160-165**
John Curtin (iii)	140-145	140-145	5-10	-	-	-	65,193	34,428	**215-220**	**175-180**
Catherine Fileman-Wright (iv)	40-45	-	-	-	3,600	-	43,943	-	**85-90**	**-**
Lucy Hunt (v)	35-40	-	-	-	-	-	17,362	-	**55-60**	**-**

Emoluments which reflect gross salaries, and performance related pay are the amounts paid in the financial year. 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, Commonwealth and Development Office (FCDO) who is seconded to the Environment Agency. The amounts shown above are the amounts reimbursed to the FCDO, exclusive of VAT which is recoverable by the Environment Agency. The pension benefits disclosed above represent the contributions the Environment Agency reimburses to the FCDO 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 left the organisation on 25 November 2020. Full year equivalent pay was in the range £145,000 - £150,000. In 2019-20 Toby Willison was awarded performance related pay for 2018-19 which was paid in January 2020. More information regarding the safeguards put in place immediately after his resignation can be found in the Specific Executive Measures section of the Governance Statement.

iii. In 2020-21 John Curtin was awarded performance related pay for 2019-20 which was paid in November 2020.

iv. Catherine Fileman-Wright was the interim Executive Director of Flood and Coastal Erosion Risk Management from the 1 December 2020 to 31 March 2021. Full year equivalent pay was in the range £115,000 - £120,000.

v. Lucy Hunt started as the Executive Director Chief Operating Officer on 1 December 2020. Full year equivalent pay was in the range £125,000 - £130,000.

Table 4: Pension benefits of executive directors during the last two financial years (audited)

Executive Director	Accrued pension at 31 March 2021 (£5,000 range)	Increase (decrease) in accrued pension during year (£2,500 range)	Accrued lump sum at 31 March 2021 (£5,000 range)	Increase (decrease) in lump sum during year (£2,500 range)	CETV at 31 March 2020 (£000s)	CETV at 31 March 2021 (£000s)	Real increase (decrease) in CETV (£000s)
Sir James Bevan (i)	85-90	0-2.5	265-270	5-7.5	2,064	2,073	29
Toby Willison	65-70	0-2.5	110-115	(2.5-5)	1,284	1,317	(9)
Harvey Bradshaw (ii)	-	-	-	-	-	-	-
John Curtin	60-65	2.5-5	90-95	2.5-5	972	1,054	10
Catherine Fileman-Wright	60-65	0-2.5	105-110	2.5-5	1,208	1,282	39
Lucy Hunt	25-30	0-2.5	5-10	0-2.5	298	311	7

The Environment Agency remunerates its employees in line with standard public sector pay and pension policies. The accrued pension at 31 March 2021 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 2021. Changes in the lump sum calculation can fluctuate depending on changes in the final salary figures at the start and end of the period, which can sometimes result in a reduction in value.

CETV - cash equivalent transfer value. This is the amount an individual's total accrued pension benefits would represent if transferred to an alternative pension scheme in exchange for giving up all rights under the current 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).

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

(ii) Harvey Bradshaw opted out of the pension scheme on 31 March 2020. His CETV value at the time of opting out was £1,462,000.

Staff Report

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

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

	2020-21			2019-20		
	Permanent	Temporary	**Total**	Permanent	Temporary	Total
Directly employed	9,964	306	**10,270**	9,807	340	**10,147**
Contractors	-	425	**425**	-	518	**518**
Total	**9,964**	**731**	**10,695**	**9,807**	**858**	**10,665**

The number of staff employed on capital projects was 1,029 (2019-20,1,216).

As at 31 March 2021, the Environment Agency had four staff loaned out to government departments to support EU exit. Table 6 provides a breakdown by grade. The average length of these temporary assignments was two years. There were no redeployments in respect of COVID-19.

Table 6: Staff on loan to support EU exit at 31 March 2021

	Headcount
DD1	-
SG7	1
SG6	1
SG5	-
SG4	1
SG3	1
Total	**4**

In March 2021, the Environment Agency employed 94 executive managers (equivalent to senior civil servant grades). The breakdown of these by level is shown in table 7.

Table 7: Executive manager breakdown on 31 March 2021

	Headcount	SCS Equivalent Payband
Chief Executive	1	3
Executive directors	4	3
Directors	18	2
Deputy directors	71	1
Total	**94**	

All of the above are Environment Agency employees with the exception of the Chief Executive who is on a secondment from the Foreign, Commonwealth and Development Office. Four are on secondment to other organisations, mainly Defra.

Equality, Diversity and Inclusion

We follow the Defra group Equality, Diversity and Inclusion (EDI) strategy 2020 to 2024 which builds on the previous 2017 to 2020 strategy and has been developed with input from EDI networks, HR, trade unions and others across Defra group organisations.

The strategy focuses on delivering against five key objectives:

- Create more inclusive cultures
- Build and sustain a diverse workforce across the Environment Agency and Defra group
- Enhance making the UK a great place to live for all citizens
- Improve EDI capability and confidence
- Communicate, raise awareness, and report progress

The Environment Agency looks to create a sense of belonging for all our employees whatever their background, so that they will be heard and feel supported to bring their best self to work.

Gender

We monitor the gender split of our workforce and have included the current numbers in table 8. This year we have again seen an improvement in the balance of men and women at all grades.

Table 8: Gender split on 31 March 2021

Headcount	Male	Female
Chief Executive, Executive Directors, Directors and Deputy Directors	53	41
All other staff	6,019	4,663
Total	**6,072**	**4,704**

The gender pay gap is the difference in the average hourly wage of all men and women across a workforce. We have a higher proportion of men than women in both higher paid and lower paid roles. Our gender pay gap as at 31 March 2020 reduced to 1.4% (31 March 2019, 1.9%). This is significantly lower than the overall UK gender pay gap average of 17.3%.

Disability

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 who are autistic, and those dealing with cancer, chronic pain, dyslexia, hearing loss, fatigue, inflammatory bowel disease, mental health, physical mobility, stammering and visual impairment. Executive Manager champions also support these networks working together with them and disability networks and champions from across the wider Defra group, sharing knowledge and experience to improve the day to day working environment for employees with disabilities.

The feedback of disabled colleagues remains a key driver in helping to build on our continued commitment, in addition to the continued learning and shaping of our disability action plan. We champion career development, career progression and retention of our disabled employees and carry out reviews to make sure we do not discriminate against them. We have a centralised workplace adjustments process for employees with a disability, impairment or long-term medical condition, which is complimented by a disability leave policy, and an employee disability passport. The employee passport is a confidential document to help our employees to have discussions with their line manager about the support they need. It is also a key document when an employee moves to a new team and can be shared with the new line manager to ensure continuity of support.

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.

Staff turnover

Staff turnover in 2020-21 was 4.0% (2019-20, 4.3%).

Sickness absence data

We monitor staff sickness absences and have policies in place to minimise them. An average of 4.1 days per full time equivalent employee was lost to sickness absence in 2020-21 (2019-20, 5.9 days).

Staff engagement

Since our last full employee survey in 2018, the Environment Agency has run regular pulse surveys to evaluate our key metrics for staff engagement. Since March 2020, the surveys have been flexible to make space to hear how staff are coping with the different ways of working and what support they have needed.

The results from our latest pulse survey (4,368 respondents) show that overall engagement has stayed fairly stable; it's at 71% now compared to 72% in October 2018. The indicators that make up engagement have recorded small changes over the past 15 months; overall job satisfaction and motivation stay the same while we have seen some increases in loyalty to the Environment Agency - people who are proud to work here and would recommend us to others. We need to keep a focus on showing staff how their work contributes to EA2025 outcomes.

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. Table 9 shows how much we have spent on consultants and temporary workers over the past two years (Table 5 shows the numbers employed under the category “contractors”).

Table 9: Expenditure on temporary workforce

	2020-21	2019-20
	£ million	£ million
Consultancy	8.5	14.0
Temporary workers and contractors	6.6	7.0
Total	**15.1**	**21.0**

Tax arrangements of public sector appointees

We provide information about appointments of consultants or staff that last longer than six months and where the individuals earn more than £245 per day, where we pay by invoice rather than through the payroll. 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 10: Off-payroll appointments at 31 March 2021, for more than £245 per day and that last longer than six months

Number of existing engagements as of 31 March that have existed for:	Number
Less than one year	1
Between one and two years	-
Between two and three years	1
Between three and four years	-
Four years or more	1
Total	**3**

During this financial year there was a total of three off-payroll appointments lasting more than six months. All of these engagements were assessed during the year with the result being that the arrangements were deemed out-of-scope of the IR35 intermediaries' legislation.

There were nineteen Board members or senior officials with significant financial responsibility over the organisation during the financial year 2020-21. 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 FCDO, 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 over the past two financial years is shown below in table 11.

Table 11: Exit packages for the financial year 2020-21 (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	-	1	1	-	0.0	0.0
£25,001 - £50,000	-	-	-	-	-	-
£50,001 - £100,000	2	-	2	0.1	-	0.1
Total	**2**	**2**	**4**	**0.1**	**0.0**	**0.1**

*Other departure costs include those on voluntary early release schemes and early, flexible and ill health retirements as well as other agreed departures.

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.

Exit packages for the financial year 2019-20 for comparison (audited)

There were no payments made relating to exit packages during the financial year 2019-20.

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 2020-21 was £185,000-190,000 (2019-20, £185,000-190,000). This was 5.1 times (2019-20, 5.2 times) the median remuneration of the workforce, which was £36,854 (2019-20, £36,071).

No employees received remuneration in excess of the highest-paid director (2019-20, none). The range of banded remuneration for employees was £15,000 to £20,000 up to £185,000 to £190,000, unchanged from 2019-20. Total remuneration includes salary, non-consolidated 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 2020-21 was 235 (2019-20, 225) with full-time equivalent employee numbers of 225 (2019-20, 210).

Table 12: Percentage of pay bill spent on facility time

Measures	Cost (£ millions)	
	2020-21	2019-20
Total facility time by union officials	0.5	0.6
Total all staff	386.8	365.7
Percentage on facility time	0.1%	0.2%

Table 13: Percentage of staff time spent on facility time

Measures	Time (in hours)	
	2020-21	2019-20
Total facility time by union officials	7,859	9,674
Total working hours by union officials	433,363	404,502
Percentage on facility time	1.8%	2.4%

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

Percentage of time	Employee Headcount	
	2020-21	2019-20
0%-1%	173	135
1%-50%	62	90
Total	**235**	**225**

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 Climate Change Agreement Scheme. The CRC Energy Efficiency scheme closed on 31 March 2019, but some compliance and closure work continued in 2020-21.
- 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 and air 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:

- Capital investment strategy and delivery
- 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 1.13 of the financial statements. Income billed differs from income reported in note 6 to the financial statements due to the accounting policy on accrued and deferred income disclosed in note 1.13. 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	Income billed	Deficit or (surplus)
	£ million	£ million	£ million
Abstraction charges	154.7	(138.9)	15.8
Navigation licences	11.2	(9.0)	2.2
Fishing licences	24.1	(24.4)	(0.3)
EPR water quality	70.1	(70.1)	-
EPR installations	28.6	(28.6)	-
EPR waste	31.2	(31.2)	-
Hazardous waste	13.7	(12.7)	1.0
Emissions trading and carbon reduction commitment	4.7	(4.5)	0.2
Nuclear regulation	19.0	(18.4)	0.6
Other environmental protection charges	18.1	(17.8)	0.3
Total 2020-21	**375.4**	**(355.6)**	**19.8**
Total 2019-20 (restated)	**362.6**	**(352.4)**	**10.2**

A correction to the method for calculating the reservoir operating agreements financial liability meant that the deficit on abstraction charges for 2019-20 needed to increase by £8m. The changes are further described in note 16 of the accounts.

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

	2020-21		2019-20	
Category / type	Number	£ millions	Number	£ millions
Write-off of sundry debts	176	2.9	203	3.3
Loss of assets	37	-	59	-
Special payments	17	0.4	9	0.2
Other (cash losses, fruitless payments, unenforceable claims, special payments and gifts)	70	1.2	117	0.2
Total	**300**	**4.5**	**388**	**3.7**

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.

Special payments include 2 special severance payments totalling £32,000. The highest was £22,500 and the lowest £9,500.

Losses and special payments individually over £300,000

There was one loss and no special payment in excess of £300,000. (In 2019-20 there was also one loss and no special payments disclosed). The loss was a result of the Secretary of State's decision to confirm salmon and sea trout byelaws that prohibited salmon net fishing. This decision led to the Environment Agency deciding to make compensation payments as per the terms of the byelaw. The compensation was £913,000 calculated on the basis of catch returns submitted and is shown in table 16 as 'Other'. There were no gifts in excess of £300,000 in 2020-21 or 2019-20.

Contingent liabilities (audited)

There is a contract dispute case where the Environment Agency has a possible obligation arising from decisions made during the course of construction. It is being resolved through the dispute resolution mechanisms in the contract. It is unclear whether there will be an outflow of economic benefits and when that outflow if any may be. There is a contingent liability relating to waste repatriation, which the Environment Agency is the competent authority where waste has been illegally exported and needs to be repatriated or otherwise disposed of. It was also reported in last year's annual report and remains as there is still uncertainty due to not being able to travel to review the waste. Some progress has been made in discussions with shipping companies which may reduce the likelihood of an economic outflow, which is estimated at £1-2 million. All efforts will be made to reduce the liability. There are no other contingent liabilities, remote or otherwise, that require disclosure in the annual report and accounts.

J D. Bevan

Sir James Bevan, Chief Executive and Accounting Officer

19th November 2021

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 2021 under the Environment Act 1995. The financial statements comprise: 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. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards (IFRS) as interpreted by HM Treasury's Government Financial Reporting Manual.

I have also audited the information in the Accountability Report that is described in that report as having been audited.

In my opinion, except for the effects of the matters described in the basis for qualified audit opinion on the financial statement paragraph, the financial statements:

- give a true and fair view of the state of the Environment Agency's affairs as at 31 March 2021 and of the net expenditure for the year then ended;
- have been properly prepared in accordance with the Environment Act 1995 and Secretary of State directions issued thereunder.

Basis for qualified opinion on the financial statements

I have qualified my opinion on the financial statements in one respect:

I am unable to obtain sufficient appropriate evidence that the value of Property, Plant and Equipment in the statement of financial position at 31 March 2021 is free from material misstatement due to the following two matters:

- Firstly, the Environment Agency has not correctly applied the Depreciated Replacement Cost method for valuing its Operational Assets as required by its financial reporting framework. Note 7 of the accounts shows operational assets of £2.8 billion at 31 March 2021 and of £2.7 billion at 31 March 2020. I am unable to obtain sufficient appropriate evidence that the value of Property, Plant and Equipment in the Statement of Financial Position at 31 March 2021 and 31 March 2020 is free from material misstatement in respect of this matter. I am unable to quantify the impact on the financial statements because the Environment Agency has not obtained a professional Depreciated Replacement Cost valuation as is required for an accurate valuation under the financial reporting framework.
- Secondly, my audit has identified errors and uncertainties within the quinquennial revaluation of property, plant and equipment, as presented in Note 7. I have been unable to quantify the uncertainties because the Environment Agency has not been able to rectify the weaknesses in the revaluation.

Based on the evidence obtained I consider the impact of these issues could be material.

My report on page 82 includes further details of the matters leading to my qualified opinion.

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 for opinions

I conducted my audit in accordance with International Standards on Auditing (ISAs) (UK), applicable law 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 2019. I have also elected to apply the ethical standards relevant to listed entities. I am independent of the Environment Agency in accordance with the ethical requirements that are relevant to my audit of 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.

Conclusions relating to going concern

In auditing the financial statements, I have concluded that the Environment Agency's use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work I have performed, I have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Environment Agency's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

My responsibilities and the responsibilities of the Accounting Officer with respect to going concern are described in the relevant sections of this certificate.

The going concern basis of accounting for the Environment Agency is adopted in consideration of the requirements set out in HM Treasury's Government Reporting Manual which require entities to adopt the going concern basis of accounting in the preparation of the financial statements where it anticipated that the services which they provide will continue into the future.

Other Information

The other information comprises information included in the annual report but does not include the parts of the Accountability Report described in that report as having been audited, the financial statements and my auditor's certificate thereon. The Accounting Officer is responsible for the other information. My opinion on the financial statements does not cover the other information and except to the extent otherwise explicitly stated in my certificate, 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 I identify such material inconsistencies or apparent material misstatements, I am required to determine whether this gives rise to a material misstatement in the financial statements themselves. 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, based on the work undertaken in the course of the audit:

- the parts of the Accountability Report to be audited have been properly prepared in accordance with Secretary of State directions made under the Environment Act 1995; and
- the information given in the Performance and Accountability Reports for the financial year for which the financial statements are prepared is consistent with the financial statements.

Matters on which I report by exception

In respect solely of the limitations in receiving sufficient appropriate evidence regarding the valuation of Property, Plant and Equipment described above:

- adequate accounting records have not been kept ; and
- I have not received all of the information and explanations I require for my audit.

In all other respects, 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 material misstatements in the Performance and Accountability reports. I have nothing to report in respect of the following matters which I report to you if, in my opinion:

- the financial statements and the parts of the Accountability Report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of remuneration specified by HM Treasury's Government Financial Reporting Manual are not made; or
- the Governance Statement does not reflect compliance with HM Treasury's guidance.

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 in accordance with the applicable financial reporting framework and for being satisfied that they give a true and fair view;
- internal controls as the Accounting Officer determines are necessary to enable the preparation of financial statement to be free from material misstatement, whether due to fraud or error.
- assessing the Environment Agency's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Accounting Officer anticipates that the services provided by the Environment Agency will not continue to be provided in the future.

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 Environment Act 1995.

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue a certificate that includes my opinion. 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.

I design procedures in line with my responsibilities, outlined above, to detect material misstatements in respect of non-compliance with laws and regulation, including fraud.

My procedures included the following:

- Inquiring of management, the Environment Agency's head of internal audit and those charged with governance, including obtaining and reviewing supporting documentation relating to the Environment Agency's policies and procedures relating to:
    - identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
    - detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud; and
    - the internal controls established to mitigate risks related to fraud or non-compliance with laws and regulations including the Environment Agency's controls relating to the Environment Act 1995 and Managing Public Money;
- discussing among the engagement team and involving relevant internal and or external specialists including specialist advice on asset valuations and pensions valuations, regarding how and where fraud might occur in the financial statements and any potential indicators of fraud. As part of this discussion, I identified potential for fraud in the following areas: revenue recognition and the posting of unusual journals;
- obtaining an understanding of the Environment Agency's framework of authority as well as other legal and regulatory frameworks that the Environment Agency operates in, focusing on those laws and regulations that had a direct effect on the financial statements or that had a fundamental effect on the operations of the Environment Agency. The key laws and regulations I considered in this context included the Environment Act 1995, Managing Public Money and relevant employment, taxation and pensions legislation; and
- specific risk assessments performed in respect of significant risks relating to fraud and irregularity: risk-based analysis of manual journals to identify those presenting higher risk of fraud, analysis of individual income streams to consider the potential risk of fraud in revenue recognition; analysis of individual expenditure streams to consider the risk of fraud and irregularity.

In addition to the above, my procedures to respond to identified risks included the following:

- reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with relevant laws and regulations discussed above;
- enquiring of management, the Audit Committee and in-house legal counsel concerning actual and potential litigation and claims;
- reading minutes of meetings of those charged with governance and the Board;
- in addressing the risk of fraud through management override of controls, testing the appropriateness of journal entries and other adjustments; assessing whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business; and

- substantive testing of income streams to address risk of fraud in revenue recognition and substantive testing of expenditure streams to address the risk of fraud and irregularity.

I also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and significant component audit teams and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

A further description of my responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of my certificate.

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.

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.

Gareth Davies **23 November 2021**

Comptroller and Auditor General

National Audit Office
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The Report of the Comptroller and Auditor General to the House of Commons

Introduction

1. The Environment Agency (EA) is the leading public body for protecting and improving the environment in England. EA has many responsibilities including: flood and coastal erosion risk management; water resource management; navigation of certain waterways; waste management and pollution incidents; reducing industry's impact on the environment; cleaning up rivers, coastal waters and contaminated land; and improving wildlife habitats.

2. EA uses publicly funded assets to meet those responsibilities. At the end of the 2020-21 financial year the net book value of EA's property, plant and equipment was £3.3 billion (2019-20: £3.2 billion) which included operational assets of £2.8 billion (2019-20: £2.7 billion). Net book value is a valuation of an asset that reflects its original cost and any later changes to it. EA uses operational assets to manage water resources, waterways and flood and coastal erosion risks. These assets typically include barriers, pumping stations and water monitoring assets, such as telemetry stations and boreholes.

3. I have qualified my opinion for 2020-21 because I have been unable to obtain sufficient assurance that values for property, plant and equipment recorded in those accounts are not materially misstated. This is for two reasons:

   - The valuation basis used for its operational assets is, as in the 2019-20 annual report and accounts, incorrect and I consider the impact of this could be material.
   - Due to errors and control issues with EA's Quinquennial review of its property plant and equipment I cannot obtain assurance that the value of any other property, plant and equipment is not materially misstated.

   This report sets out my reasons for the qualification. I also report on other matters I found that impacted upon my audit and contributed to the delay in its completion.

Operational Assets Valuation Methodology

4. Under the HM Treasury Financial Reporting Manual (FReM), EA must value its specialised operational assets at current value in existing use to give a true and fair position of the assets at the reporting date. The specialist nature of EA's operational assets means there is no active external market to provide such a valuation. The only suitable professional valuation methodology in such cases is Depreciated Replacement Cost (DRC) which requires assets to be valued based on a modern equivalent asset. This is a specialist technique often requiring expert support.

5. DRC valuation needs periodic professional valuations with the use of appropriate indices in intervening years. In its 2019-20 annual report and accounts, EA stated in its accounting policies that it considered an alternative valuation approach known as modified historic cost accounting (MHCA) as a reasonable proxy for DRC. MHCA involves valuing these assets

on a historic cost basis revalued annually using indices. I concluded in my audit of the 2019-20 annual report and accounts, that MHCA is not a materially accurate proxy for the DRC valuation required by the financial reporting framework. I therefore qualified my opinion on the 2019-20 annual report and accounts for that reason.

6. EA has notified me that it is developing a project to carry out a full DRC valuation of its operational assets. This is still underway and has not therefore had any impact on the 2020-21 accounts. My view has not changed since 2019-20 and I am therefore qualifying my opinion on the 2020-21 accounts for the same reasons as I did the previous year. I remain unable to obtain sufficient evidence to conclude that the valuations of operational assets in the 2020-21 financial statements using the MHCA approach and the corresponding comparative figures are free from material misstatement.

Quinquennial Revaluation

7. My audit approach is designed to obtain sufficient assurance that accounts are free from material error. I planned my audit to achieve this through sample testing of account areas alongside considering and evaluating work undertaken by management to support the valuations used to underpin the accounts.

8. Below I describe the issues my audit of the EA's property plant and equipment has identified in addition to the DRC matter discussed above.

9. In 2020-21 EA carried out a quinquennial review (QQR) of its freehold land, freehold buildings and dwellings. The QQR is a professional valuation which under FReM requirements is conducted at least every 5 years. It is a necessary exercise to demonstrate that assets are valued appropriately at year end.

10. My audit identified the following limitations in the way the QQR has been conducted:

    - EA was unable to provide a listing of land holdings that distinguished between the land which should be valued through the QQR and that which was infrastructure land which should be valued through DRC;

    - Poor data quality of the underlying property, plant and equipment records has prevented EA from obtaining a valuation for the correct asset base, impacting the resulting value presented within the financial statements. My audit identified data quality issues including properties revalued which should not have been and properties excluded which should have been revalued.

    - errors in the application of the revaluation to EA's property, plant and equipment records, including applying revaluations to the wrong assets.

    In the context of wider asset issues described below and the audit timetable, management are not seeking to resolve the issues with the QQR for 2020-21. These limitations mean I have been unable to get assurance over the value of assets covered by the QQR, and therefore I have limited the scope of my opinion in this respect.

Management of non-current asset records

11. Further to the reasons outlined above leading to my qualification my audit of non-current assets identified the following data quality issues in EA's underlying asset records.

    - assets recorded on the fixed asset register that are not owned by EA;
    - capitalisation of expenditure that does not meet the criteria of the financial reporting framework; and
    - the inclusion of assets that have been decommissioned or demolished.

12. Although these errors were not material, they were significant and represent a worsening of the position over time. While EA have made some attempts to cleanse their asset records in the last year, more still needs to be done and I have concerns that these issues could result in material error in the future if not addressed.

Other matters

Reservoir Operating Agreements

13. In 1989 the predecessor body to the Environment Agency entered into several reservoir operating agreements with water companies. The agreements, set up by HMT included payments by the Agency, indexed upwards annually based on the RPI, and which are payable in perpetuity. The liability in the 2019-20 EA accounts was £142m.

14. My 2020-21 audit identified that the approach taken to valuing the long-standing liability was not in accordance with the relevant financial reporting standard (IFRS 9). EA has produced a revised liability under IFRS 9 which is calculated to be £410m, an increase of £268m. This has also resulted in a prior period adjustment. The issue required significant management and audit time to resolve. I will work with Defra to ensure that areas of significant management judgement and/or estimation are focused on early and prioritised for resolution.

Conclusion

15. In my opinion, EA has not yet valued its operational assets in accordance with HM Treasury's financial reporting requirements set out in the FReM. I have therefore issued a qualified opinion again. My work has not identified problems with the operational management or general condition of EA's flood defence assets.

16. EA is in the process of obtaining a full DRC valuation of its operational assets. EA has also agreed to carry out a review of the data quality of and controls over its fixed assets register. I will continue to monitor EA's progress in both areas and will assess the impact of this work on my audit certificate and report next year.

17. I have also been unable to conclude that the value of EA's property, plant and equipment subject to the QQR as at 31 March 2021 is free from material misstatement. I have reflected this new point in my audit opinion.

18. I recommend that EA carries out a review of the data quality and cleanse the property, plant and equipment records prior to embarking on a large revaluation exercise.

19. I also recommend that EA develop more robust controls over the input and maintenance of data in its property, plant and equipment records.

20. Achieving a timely completion of audited accounts will require the problems that drove such high levels of error in 2020-21 to be addressed successfully. I will monitor EA's progress on this and I will continue to work with the Agency to return the accounts and audit timetable to one that supports effective parliamentary scrutiny.

Gareth Davies **23 November 2021**

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 2021		2020-21	2019-20 Restated*
	Note	£ million	£ million
Expenditure			
Staff costs	3	501.7	506.4
Capital works expensed in year	4	478.9	333.3
Depreciation and amortisation	7,8	113.6	108.9
Other expenditure	5	557.6	490.6
		1,651.8	**1,439.2**
Income			
Revenue from contracts with customers	6	(467.5)	(433.8)
Other operating income	6	(31.2)	(27.0)
		(498.7)	**(460.8)**
Net expenditure	2	**1,153.1**	**978.4**
(Gain)/Loss on sale of assets		36.8	14.2
Interest receivable		-	(0.4)
Financing on pension scheme assets and liabilities	15.3	3.2	16.9
Net expenditure after interest		**1,193.1**	**1,009.1**
Other comprehensive expenditure			
Revaluation of property, plant and equipment	7	(131.3)	(54.7)
Revaluation of intangible assets	8	(13.0)	(11.1)
Actuarial loss/ (gain) on pension scheme assets and obligations	15.3	916.0	(618.2)
Total Comprehensive Net Expenditure for the year		**1,964.8**	**325.1**

*2019-20 value for other expenditure has been restated. Details are disclosed in note 16.1.

2019-20 values for revenue from contracts with customers has been restated. Details are disclosed in note 6.

Revenue from contracts with customers has been re-presented. Details are disclosed in note 6.

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

The notes on pages 93 to 138 form part of these accounts.

Statement of Financial Position

As at 31 March 2021		31 March 2021		31 March 2020 Restated*		1 April 2019 Restated*	
	Note	£ million	£ million	£ million	£ million	£ million	£ million
Non-current assets							
Property, plant and equipment	7	3,254.2		3,152.8		3,090.1	
Intangible assets	8	146.4		130.5		120.5	
Total non-current assets			**3,400.6**		**3,283.3**		**3,210.6**
Current assets							
Assets classified as held for sale		8.6		12.0		17.9	
Trade, contract and other receivables	10	116.0		93.9		95.7	
Cash and cash equivalents	11	72.4		131.4		108.5	
Total current assets			**197.0**		**237.3**		**222.1**
Total assets			**3,597.6**		**3,520.6**		**3,432.7**
Current liabilities							
Trade, other payables and contract liabilities	12	(463.3)		(411.9)		(365.1)	
Reservoir operating agreements	16.1	(21.5)		(21.1)		(20.8)	
Total current liabilities			**(484.8)**		**(433.0)**		**(385.9)**
Total assets less current liabilities			**3,112.8**		**3,087.6**		**3,046.8**

Non-current liabilities							
Provisions		(11.0)		(5.3)		(4.9)	
Reservoir operating agreements	16.1	(388.0)		(383.2)		(375.4)	
Pension liabilities	15.3	(1,060.3)		(133.3)		(655.4)	
Trade, contract, other payables and liabilities	12	(3.5)		(1.0)		(1.2)	
Total non-current liabilities			**(1,462.8)**		**(522.8)**		**(1,036.9)**
Assets less liabilities			**1,650.0**		**2,564.8**		**2,009.9**
Taxpayers' equity							
Revaluation reserve		1,952.2		1,896.3		1,908.9	
Pensions' reserve		(1,060.3)		(133.3)		(655.4)	
General reserve		758.1		801.8		756.4	
Total Taxpayers' equity			**1,650.0**		**2,564.8**		**2,009.9**

*The 31 March 2020 and 1 April 2019 values for reservoir operating agreements and the general reserve have been restated. Details are disclosed in note 16.1.

The notes on pages 93 to 138 form part of these accounts. The financial statements on pages 86 to 92 were approved by the Board on 19 November 2021 and signed on its behalf by:

J D. Bevan

Sir James Bevan, Chief Executive and Accounting Officer

19th November 2021

Statement of cash flows

For the year ended 31 March 2021		2020-21		2019-20 Restated*	
	Note	£ million	£million	£ million	£ million
Cash flows from operating activities					
Net expenditure after interest		(1,193.1)		(1,009.1)	
Depreciation and amortisation	7,8	113.6		108.9	
Impairment of non-current assets	9	45.3		17.9	
Loss on sale of assets		36.8		14.2	
Movement in trade, contract and other receivables	10	(22.1)		1.8	
Movement in trade, other payables and contract liabilities	12	53.9		46.6	
Movement in capital payables	12	(0.1)		0.6	
Movement in Reservoir Operating Agreement		5.2		8.1	
Movement in provisions		5.7		0.4	
Pension reserve transfer	13	11.0		96.1	
Net cash outflow from operating activities			**(943.8)**		**(714.5)**
Cash flows from investing activities					
Purchase of property, plant and equipment	7	(144.6)		(130.2)	
Purchase of intangible assets	8	(24.5)		(21.7)	
Movement in capital payables	12	0.1		(0.6)	
Proceeds of disposal of property, plant and equipment		3.8		9.9	
Net cash outflow from investing activities			**(165.2)**		**(142.6)**

Cash flows from financing activities					
Grants from Defra	17.1	1,050.0		880.0	
Net cash inflow from financing activities			**1,050.0**		**880.0**
Net (outflow)/inflow in cash and cash equivalents in the period	11		**(59.0)**		**22.9**
Cash and cash equivalents at the beginning of the period	11		131.4		108.5
Cash and cash equivalents at the end of the period	11		**72.4**		**131.4**

*2019-20 values for net expenditure and reservoir operating agreements have been restated. Details are disclosed in note 16.1.

The notes on pages 93 to 138 form part of these accounts

Statement of Changes in Taxpayers' Equity

For the year ended 31 March 2021		Revaluation reserve	General reserve	Pension reserve	Total reserves
	Note	£ million	£ million	£ million	£ million
Changes in taxpayers' equity					
Balance at 1 April 2019*		**1,908.9**	**756.4**	**(655.4)**	**2,009.9**
Net gain on revaluation of property, plant and equipment	7	54.7	-	-	54.7
Net gain on revaluation of intangible assets	8	11.1	-	-	11.1
Actuarial gain on pension scheme assets and obligations	15.3	-	-	618.2	618.2
Transfers between reserves	13.2	(78.4)	174.5	(96.1)	-
Retained deficit*		-	(1,009.1)	-	(1,009.1)
Grants from Defra	17	-	880.0	-	880.0
Balance at 1 April 2020		**1,896.3**	**801.8**	**(133.3)**	**2,564.8**
Net gain on revaluation of property, plant and equipment	7	131.3	-	-	131.3
Net gain on revaluation of intangible assets	8	13.0	-	-	13.0
Actuarial gain on pension scheme assets and obligations	15.3	-	-	(916.0)	(916.0)
Transfers between reserves	13.1	(88.4)	99.4	(11.0)	-
Retained deficit		-	(1,193.1)	-	(1,193.1)
Total recognised income and expense		**1,952.2**	**(291.9)**	**(1,060.3)**	**600.0**
Grant from Defra	17	-	1,050.0	-	1,050.0
Balance at 31 March 2021		**1,952.2**	**758.1**	**(1060.3)**	**1,650.0**

*Balance as at 1 April 2019 for the general reserve and the retained deficit for 2019-20 were restated. Details are disclosed in note 16.1.

The notes on pages 93 to 138 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 Statement of accounting policies

The financial statements have been prepared in accordance with the 2020-21 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.

All values are reported in pound sterling rounded to the nearest 0.1 million unless otherwise stated.

1.1 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 valuation of operational assets (reported in notes 1.9 and 7)
- The selection of appropriate indices to assist with the valuation of property, plant and equipment and intangible assets (reported in notes 1.9, 7 and 8).
- The useful economic lives of assets that form the basis of periods over which property, plant and equipment is depreciated (reported in notes 1.9 and 7) and intangible assets are amortised (reported in notes 1.10 and 8).
- The impairment of property, plant and equipment, and intangible assets (reported in notes 7 and 8) 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 capital works expensed in year income per IFRS15 (see notes 1.3, 6, 10 and 12).
- Revenue recognition regarding satisfaction of performance obligations on fees and charges per IFRS15 (reported in 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 1.13, 10 and 12).

- The classification of expenditure between property plant and equipment and capital works expensed in year (reported in notes 1.8, 1.9 and 4).
- The calculation of expected bad debts by income stream per IFRS 9 business model assessment and calculation of Expected Credit Losses (reported in note 16).
- The recognition of the liability relating to the reservoir operating agreements fixed payments at amortised cost under IFRS 9 (see notes 5.3 and 16.1). The liability is discounted using the Effective Interest Rate (EIR) method. The EIR is the rate that exactly discounts the estimated future cash payments through the expected life of a financial liability to the amortised cost of the financial liability. Significant judgements are made pertaining to the treatment of the liability including the recognition of the liability as a perpetuity at amortised cost and the expected future RPI.

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: fees relating to applications relating to a licence or permit, 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. For applications income, the performance obligation is the processing of the application and the provision of a decision and if appropriate the issuing of a permit or licence. This income is recognised at the point in time at which the decision, permit or licence is issued. Applications income is paid when the application is made or if not payment is required for processing of the application to occur. Therefore, income relating to applications not fully processed is deferred. For subsistence income the performance obligation is to provide the legal entitlement to carry out operations for the period. Subsistence income is recognised over the permit period to reflect the Environment Agency's regulation over the period. For subsistence, payment is due on the invoice date. Our approach to contract balances follows Managing Public Money and is described in note 1.13. For retail transactions and sale of goods, the customer simultaneously receives and consumes the benefits provided, and the revenue is recognised at the appropriate point in time when earned.

IFRS 15 requires disclosure on determining the transaction price. For charges income this is defined by the statutory charges that the Environment Agency is able to charge under each charging scheme.

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.

The Environment Agency recognises revenue from capital work expensed in year 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.

Revenue from capital work expensed in year arises from legally binding agreements. An agreement obligates the Environment Agency to carry out certain flood risk management works in return for a contribution from a third party, although individual agreements may include other specific obligations unique to that particular agreement.

The transaction price comprises of the total amount payable under the agreement. This is allocated to the overall completion of the flood risk management works unless there is a specific separate obligation (for example, future maintenance works). Revenue is recognised over the progress of the completion of the flood risk management works using an input cost-based method. The costs incurred to date are assessed against the overall forecast costs for the project to give an indication of completion which is then applied to the relevant transaction price.

Due to the unique nature of each project and subsequently a corresponding agreement, the satisfaction of the performance obligations do not necessarily have a direct relationship to the timing of payments under an agreement. Therefore, the corresponding contract asset and liability balances can fluctuate from year to year.

1.4. Grant-in-aid

The Environment Agency receives grants that are classified as either 'resource' or '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.

1.5. 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.

1.6. Expenditure

Expenditure is recognised on an accruals basis. Accrued expenditure is recognised when the Environment Agency has an unconditional obligation to pay customers, and is based on agreed amounts, contractually or by another form of mutual agreement.

1.7. Grant expenditure

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

The Environment Agency also has responsibility for administering grants to risk management authorities which support waste and landfill initiatives and improvements to the water environment, flood resilience, flood management and surface water mapping. 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 recognised in the financial statements when the Environment Agency has a present obligation to the grantee as a result of it meeting the entitlement conditions set out in the grant agreement, and it can form a reliable estimate of the expenditure.

1.8. Capital works expensed in year

Where the Environment Agency undertakes works which are capital in nature but will not receive itself receive direct future economic benefits (although the work will reduce national flood risk), or cannot reliably estimate the useful life of the asset or is restoring an asset to target condition the 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.

1.9. Property, plant, and equipment

The Environment Agency capitalises all land regardless of value. Other categories of property, plant and equipment are capitalised if the asset has a cost of £5,000 or more.

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

Freehold land, buildings and dwellings are reported at a 'fair value' which is assessed on an open market value for existing use, rather than simply market value. These assets are subject to independent professional revaluation in accordance with the Royal Institute of Chartered Surveyors valuation standards every five years. In the intervening years, the assets are revalued annually using suitable indices.

The vast majority of the Environment Agency's property, plant and equipment value comprises of operational assets, as set out in note 7.

Operational assets are used to deliver environmental outcomes. These assets are often relatively unique in nature, and 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 locks, weirs, sluices, gauging stations, pipelines and tunnels.

The FReM requires these assets to be accounted for in the statement of financial position at their Depreciated Replacement Cost. Due to the enormous logistical and technical challenge as well as substantial expenditure that would be required to obtain replacement cost professional valuations for over 8,000 operational assets, the Environment Agency uses a Modified Historic Cost method as a proxy for Depreciated Replacement Cost. This means that an appropriate annual cost inflation index is used to increase the gross book value of these assets each year. Section 16 of the governance statement covers action that is being taken to change the valuation methodology for operational assets. This is in response to a qualified audit opinion, specifically limited to this technical accounting policy.

Other plant and machinery, vehicles, furniture & fittings, and IT equipment are valued at cost with a suitable index applied in subsequent years.

Assets under construction are recorded at cost and are not revalued.

Depreciation is calculated to write off the value of property, plant and equipment 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, or on assets under construction.

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 on asset creation

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 individual assets remain in use after this expected life the asset will be extended accordingly on an individual basis.

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.

1.10. Intangible assets

Intangible assets with a value of £5,000 or more are capitalised and are then revised annually through the use of suitable indices to fair value. 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 on asset creation

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

1.11. 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.

1.12. 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.

1.13. 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. In such circumstances this treatment overrides the standard revenue recognition criteria 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.

1.14. 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.

1.15. Cash and cash equivalents

Cash and cash equivalents include cash held in the bank with the Government Banking Service and other approved commercial bank accounts.

1.16. 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.

1.17. Financial instruments

These comprise Financial Assets and Financial Liabilities.

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".

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 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.

1.18. Value added tax (VAT)

By HM 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.

1.19. 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 2019. 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.

1.20. 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 £0.2 million and is therefore not material to the Environment Agency's accounts so their results have not been consolidated and the plan for the future of the IDD remains under review.

1.21. Prior Period Adjustments

Items are restated retrospectively to:

- correct a material prior year error; or
- apply a material change in accounting policy

If it is impracticable to determine the period specific or cumulative effects of a policy change or error, re-statements are made to the earliest practical period. Where a material prior year error is identified, it is corrected by restating the comparative amounts for the prior years presented in which the error occurred, or, where the error occurred before the earliest period presented, by restating the opening balances for the earliest prior year presented. Where an accounting policy has been changed, adjustments are made to the opening balance of each affected component of equity for the earliest period presented and other comparative amounts are disclosed for each prior year, presented as if the new policy had always been applied, unless the new standard or FReM interpretation requires or permits different approaches.

1.22. 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

IFRSs not yet effective	Environment Agency impact
IFRS 16 - Leases (IAS 17 replacement) EU adopted from 1 Jan 2019 Effective in UK government from 1 April 2022	The Environment Agency will adopt IFRS 16 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. It was initially planned to be adopted in UK government from 1 April 2020, however due to the need to focus urgent attention and resources on the COVID-19 pandemic, HM Treasury has agreed with the Financial Reporting Advisory Board to delay implementation of the standard for two years. The Environment Agency had already undertaken an initial assessment of the impact of IFRS 16, working as part of a Defra group-wide project, in readiness for the original implementation date. IFRS 16 introduces a single lessee accounting model and requires a lessee to recognise assets and liabilities for almost all leases. This will result in an increase in Property, Plant and Equipment and total financial debt at 1 April 2022. At inception the Environment Agency will assess whether a contract is, or contains, a lease. This assessment involves the exercise of judgement about whether the contract conveys the right to control the use of an identified asset for a period of time. 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 as the present value of future lease payments. The ROU asset is depreciated over the shorter of the lease term or the useful life of the underlying asset, on a straight-line basis. It will be subject to testing for impairment if there is an indicator for impairment. ROU assets will be included in the heading Property, Plant and Equipment and the lease liability in the heading Liabilities. The Environment Agency will separate lease and non-lease components for leases of vehicles. Vehicle leases are recognised where substantially all of the economic benefits from use of the leased asset are judged to remain with the Environment Agency. As mandated by the FReM, leases with terms of less than 12 months and leases with remaining terms of less than 12 months at the adoption date will not be capitalised under IFRS 16. The Environment Agency has elected not to recognise ROU assets and liabilities for leases of low value assets with a threshold of £5,000, applied to the cost of the underlying asset when new, or the current cost of buying the freehold for land leases. The Environment Agency will exempt many of its operational estate leases as being low value. These are typically small plots of agricultural land of only 1-3m^2, housing equipment such as telemetry, weather stations or boreholes. The payments for such leases will continue to be recognised in the Statement of Comprehensive Net Expenditure on a straight-line basis over the lease term. For administrative properties that form part of the Defra Group shared corporate estate, the Environment Agency will recognise a ROU asset and lease liability for those properties where it is the legal leaseholder or where it holds a formal sub-lease agreement. As at 31 March 2021, the Environment Agency's ROU assets for land, buildings and vehicles had an estimated combined present value of £60.5million and lease liabilities had a present value of £56.8million.
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 2023. We do not expect a significant impact of the new standard on the Environment Agency's financial statements as we have few arrangements that are likely to be within scope. We plan to do further work where there is uncertainty if arrangements come within scope.

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 & 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 2020-21	Total 2019-20 Restated*
	£ million	£ million	£ million	£ million	£ million
Staff costs	212.6	231.8	57.3	501.7	506.4
Capital works expensed in year	453.4	2.2	23.3	478.9	333.3
Depreciation and amortisation	84.9	15.3	13.4	113.6	108.9
Other expenditure	346.3	160.1	51.2	557.6	490.6
Gross expenditure	**1,097.2**	**409.4**	**145.2**	**1,651.8**	**1,439.2**
Revenue from contracts with customers	(92.1)	(374.8)	(0.6)	(467.5)	(433.8)
Other income	(6.2)	(4.7)	(20.3)	(31.2)	(27.0)
Capital grants and contributions	-	-	-	-	-
Net expenditure	**998.9**	**29.9**	**124.3**	**1,153.1**	**978.4**

*2019-20 value for Other Expenditure has been restated. Details are disclosed in note 16.1.

2019-20 values for Revenue from contracts with customers has been restated. Details are disclosed in note 6.

Revenue from contracts with customers has been re-presented. Details are disclosed in note 6.

3. Staff costs

	2020-21	2019-20
	£ million	£ million
Wages and salaries	386.8	365.7
Social security costs	43.5	42.2
Normal contributions to the Active Pension Fund (defined benefit system)	70.0	58.6
	500.3	**466.5**
Other staff related costs:		
Agency staff wages and salaries	5.3	6.5
Other staff related costs	4.4	7.4
Exit package costs	0.1	-
Special contributions towards past service deficit	31.4	-
Less amounts included within the IAS 19 Pensions charge	(101.4)	(58.6)
Pensions' charge – service cost (note 15.3)	109.4	137.5
	549.5	**559.3**
Less amounts charged to capital projects	(48.1)	(53.2)
	501.4	**506.1**
Amounts payable to Board members	0.3	0.3
Total staff costs	**501.7**	**506.4**

Note 15 provides details of the Environment Agency's pension arrangements. The remuneration and staff report provide details of the remuneration of Board members and executive directors.

4. Capital works expensed in year

Type of capital works	2020-21 £ million	2019-20 * £ million
Beach replenishment	12.3	17.2
Catchment flood management plans	19.9	15.6
Culverts and channel improvements	42.0	27.8
Embankments	80.5	59.5
Flood risk management strategies	22.9	13.2
Flood mapping	4.9	2.7
Restoration and refurbishment	187.1	151.7
Rock groynes and sea walls	33.8	9.2
Capital salaries	38.0	19.1
Navigation asset works	17.8	1.6
Other	19.7	15.7
Total	**478.9**	**333.3**

*2019-20 value for Other re-presented as per the notes below

The above analysis includes £2.3 million (2019-20, £2.1 million) of costs in relation to the Public Private Partnerships (PPP) projects at Pevensey Bay and Broadlands.

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.

Embankments

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

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.

Flood mapping

Flood mapping is the production of multi-layered 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.

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.

Capital salaries

Capital salaries represent the staff costs incurred on these capital works that are expensed in year.

Navigation asset works

The value of navigation asset works increased following the provision of additional funding for 2020-21 to invest in waterways for which the Environment Agency is responsible. It is therefore more appropriate to disclose this separately from ‘Other’ expenditure in 2020-21 and include a comparator for 2019-20.

IAS 1 disclosure – re-presentation

The types of capital works have been re-presented to ensure that the larger groups are clearly presented, and immaterial amounts are captured within ‘Other’. There has been no change to the overall reported amounts. As described above, ‘Navigation asset works’ has been added as a new line and ‘Piling’ which had been a separate line in the 2019-20 annual report and accounts has now been grouped within ‘Other’. In 2019-20, ‘Piling’ expenditure was £1.7 million and ‘Other’ included the £1.6 million for Navigation asset works, so ‘Other’ has increased by £0.1 million compared to last year’s published accounts. ‘Piling’ expenditure was £0.0m in 2020-21.

5. Other expenditure

Type of expenditure	2020-21	2019-20 Restated*
	£ million	£ million
Capital grants (note 5.4)	119.6	116.2
Hired and contracted services	85.1	61.0
Outsourced IT services	42.3	31.4
Fees and commissions	26.2	28.3
Reservoir operating agreements (note 5.3 and 16.1)	60.1	32.6
Transport and plant	17.0	18.4
Utilities	16.5	18.7
Travel and subsistence	1.5	13.1
Operating lease rentals - plant and machinery	16.1	15.8
Information technology	10.3	10.4
Defra group corporate services charge (note 5.1 and 17.2)	44.5	54.3
Buildings	15.9	13.9
Training	4.6	8.1
Operating lease rentals – other	2.9	9.0
Consumables and materials	6.7	5.9
Grants and contributions	13.8	11.8
Maintenance	3.3	2.6
Administration	2.1	2.5
Compensation payments	0.6	1.2
External Auditor’s non-audit remuneration: (note 5.2)	-	-
Bad debt write offs	2.8	4.3
Other	18.2	14.1
Impairment of non-current assets (note 9)	45.3	17.9
Movement in the expected credit loss (bad debt) provision (note 10)	2.2	(0.9)
Total	**557.6**	**490.6**

*The 2019-20 figure for Reservoir operating agreements has been restated. Details are disclosed in note 16.1.

Debts are written off when considered to be irrecoverable. Expected credit losses have been calculated and provided for in accordance with IFRS 9, as described in note 16.

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 most 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 2020-21 was £124.8 million, including £5.3 million related to EU exit projects (2019-20 was £126.5 million with £8.8 million related to EU exit costs).

£80.3 million of the expenditure in 2020-21 was incurred directly by the Environment Agency due to being under long standing contracts (2019-20, £72.2 million) 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 £44.5 million (2019-20, £54.3 million) for expenditure it incurred relating to the provision of corporate services to the Environment Agency in 2020-21. Further information on the transfer of corporate services to Defra is provided in note 17.2.

The approach to apportioning the Defra Group Corporate Service cost across the group was refined during 2019-20. The approach uses metrics driving the costs to apportion them across the group. A breakdown of the cost by function, including EU exit costs, is provided below:

Defra Group Corporate Service Function	2020-21	2019-20
	£ million	£ million
Digital, Data and Technology Services	52.6	55.6
Estates	37.7	36.3
Shared Services Connected Limited (SSCL)	11.4	10.0
Finance	10.0	9.1
Human Resources	4.4	6.3
Communications	4.5	4.9
Commercial	4.2	4.3
Total	**124.8**	**126.5**

SSCL is Defra Group’s outsourced provider of payroll, finance and HR shared transactional services. The change in the cost of finance was a result of correcting a cost allocation assumption in relation to one cost centre.

5.2. Auditor's remuneration

The external auditor's remuneration is the audit fee for the statutory audit of £250,000 (2019-20, £255,000). The cost of the audit is classified within the cost of finance and was included in the corporate services charge (note 5.1). 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 set at the time of the related agreements (generally in 1989 upon privatisation of water companies) as compensation for a return-on-investment in reservoir assets which is indexed annually by the RPI (note 16.1). The majority of the increase in expenditure this year relates to an agreement on historic costs and significant work at one reservoir. There is a timing difference in recognising the liability and the payment and recovery of costs through charges which is shown in the Abstraction deficit in table 15 of the report.

5.4. Capital grants

The Environment Agency has responsibility for administering and issuing grants to local councils, internal drainage boards (IDBs) and other risk management authorities for flood and coastal erosion risk management capital schemes. The £119.6 million expenditure can be broken down as follows:

Capital grants	2020-21	2019-20
	£ million	£ million
Local councils	101.4	102.2
Internal Drainage Boards (IDBs)	18.2	13.7
Other risk management authorities	-	0.3
	119.6	**116.2**

6. Income

	FCERM	E&B Charges	E&B	Total 2020-21	Total 2019-20 Restated*
	£ million	£ million	£ million	£ million	£ million
Abstraction charges	-	(153.2)	-	(153.2)	(129.6)
EPR water quality	-	(70.9)	-	(70.9)	(72.8)
EPR installations	-	(28.7)	-	(28.7)	(34.0)
EPR waste	-	(28.9)	-	(28.9)	(33.5)
Fishing licence duties	-	(26.3)	-	(26.3)	(21.0)
Hazardous waste	-	(13.8)	-	(13.8)	(15.4)
Nuclear waste regulation	-	(19.0)	-	(19.0)	(19.1)
Navigation licence income	-	(9.0)	-	(9.0)	(10.1)
Emissions trading and carbon reduction commitment	-	(3.2)	-	(3.2)	(6.3)
Other charges	-	(21.8)	-	(21.8)	(21.2)
Flood risk levies	(32.3)	-	-	(32.3)	(44.3)
IDB precepts	(8.1)	-	-	(8.1)	(8.0)
Capital work expensed in year*	(51.7)	-	(0.6)	(52.3)	(18.5)
Revenue from contracts with customers	**(92.1)**	**(374.8)**	**(0.6)**	**(467.5)**	**(433.8)**
EU grants	(0.5)	-	(1.6)	(2.1)	(0.6)
Other grants	(1.2)	(0.3)	(2.3)	(3.8)	(5.5)
Other income	(4.5)	(4.4)	(16.4)	(25.3)	(20.9)
Other operating income	**(6.2)**	**(4.7)**	**(20.3)**	**(31.2)**	**(27.0)**
Total income	**(98.3)**	**(379.5)**	**(20.9)**	**(498.7)**	**(460.8)**

*Capital works expensed in year income has been re-presented to ensure reflect its recognition under IFRS 15 (Revenue from contracts with customers). There has been no change to the overall reported amounts. Capital works expensed in year income of £18.5 million was reflected separately under Capital grants and contributions in 2019-20.

Abstraction charges for 2019-20 have been restated as a result of the restatement of the reservoir operating agreements liability, which is recoverable from the relevant water resources abstraction charge payers. Further details of the restatement of the reservoir operating agreements liability are disclosed in Note 16.1.

Revenue from contracts with customers above includes £2.9 million E&B charges that had been included in the contract liability balance at the beginning of the period.

6.1 Further information on material revenue from contracts with customers

Material income streams falling under IFRS15 are Abstraction charges, EPR Water quality and capital works expensed in year income.

Abstraction charges and EPR water quality charges are described in the accountability report and performance obligations and recognition follows the policy in Note 1.3. Both are split between applications income and subsistence income. Within receipts in advance there is £0.9 million of abstraction applications (2019-20, £0.0m) and £2.3 million of water quality applications (2019-20, £0.3 million) where consideration has been received but the performance obligation has not been completed. The Environment Agency expects to complete the performance obligations for these applications in 2021-22.

Capital works expensed in year income is raised to supplement grant in aid expenditure on flood defence schemes. The timing of income recognition will depend on individual legally binding agreements. Most current agreements should complete by the end of the current 6-year flood defence programme. Receipts in advance include £63.9 million of capital works expensed in year income where the contribution has been received but performance obligations have not been fully completed (2019-20, £58.4 million). There is a clause in most agreements allowing for a refund of contributions if the project spend is less than budgeted, so some of the contract liability may not be recognised.

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7. Property, plant and equipment

At 31 March 2021	Operational assets	Freehold land	Dwellings	Freehold buildings	Plant and machinery	Vehicles	Furniture & Fittings	IT Equipment	Assets under construction	Total
	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million
Cost or valuation										
At 1 April 2020	**5,500.5**	**45.3**	**35.9**	**69.3**	**54.1**	**62.2**	**37.1**	**74.8**	**276.7**	**6,155.9**
Capital expenditure	-	0.1	-	-	7.5	1.3	0.7	1.0	134.0	144.6
Assets commissioned in year	61.7	-	-	-	-	-	-	-	(61.7)	-
Disposals	(84.7)	(2.5)	(1.3)	(9.0)	(3.3)	(1.7)	(6.7)	(28.1)	-	(137.3)
Reclassification to held for sale	1.5	0.8	-	1.1	-	-	-	-	-	3.4
Revaluation and indexation	195.3	2.9	(6.0)	8.8	7.9	5.0	3.5	1.7	-	219.1
Impairment	(33.6)	(6.4)	(1.0)	(1.6)	0.2	-	-	-	(2.8)	(45.2)
Reclassification	0.3	-	-	-	0.1	(0.1)	(0.3)	-	(1.2)	(1.2)
At 31 March 2021	**5,641.0**	**40.2**	**27.6**	**68.6**	**66.5**	**66.7**	**34.3**	**49.4**	**345.0**	**6,339.3**
Depreciation										
At 1 April 2020	**2,782.0**	**-**	**12.4**	**39.1**	**38.8**	**40.8**	**30.6**	**59.4**	**-**	**3,003.1**

Provided during the period	64.1	-	0.9	1.2	9.7	7.7	3.1	4.3	-	91.0
Disposals	(53.3)	-	(0.6)	(3.7)	(3.3)	(1.5)	(6.7)	(27.7)	-	(96.8)
Revaluation and indexation	88.5	-	-	(0.1)	(0.3)	(1.0)	0.3	0.4	-	87.8
Impairment	-	-	-	-	-	-	-	-	-	-
Reclassification	2.7	-	-	-	(1.2)	-	(1.5)	-	-	-
At 31 March 2021	**2,884.0**	**-**	**12.7**	**36.5**	**43.7**	**46.0**	**25.8**	**36.4**	**-**	**3,085.1**
Net Book Value at 31 March 2021	**2,757.0**	**40.2**	**14.9**	**32.1**	**22.8**	**20.7**	**8.5**	**13.0**	**345.0**	**3,254.2**

At 31 March 2020	Operational assets	Freehold land	Dwellings	Freehold buildings	Plant and machinery	Vehicles	Furniture & Fittings	IT Equipment	Assets under construction	Total
	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million
Cost or valuation										
At 1 April 2019	**5,416.4**	**47.6**	**35.2**	**68.3**	**54.8**	**63.5**	**36.5**	**77.0**	**189.4**	**5,988.7**
Capital expenditure	-	0.1	-	-	1.9	3.4	0.2	1.3	123.3	130.2
Assets commissioned in year	30.7	-	-	0.7	-	-	-	-	(31.4)	-
Disposals	(41.9)	(0.6)	-	(0.1)	(3.9)	(4.9)	(0.2)	(4.0)	-	(55.6)
Reclassification to held for sale	7.2	(2.0)	0.3	0.3	-	-	-	-	-	5.8
Revaluation and indexation	102.9	0.4	0.4	0.5	1.3	0.2	0.6	0.5	-	106.8
Impairment	(14.8)	(0.2)	-	(0.4)	-	-	-	-	(4.7)	(20.1)
Reclassification	-	-	-	-	-	-	-	-	0.1	0.1
At 31 March 2020	**5,500.5**	**45.3**	**35.9**	**69.3**	**54.1**	**62.2**	**37.1**	**74.8**	**276.7**	**6,155.9**
Depreciation										
At 1 April 2019	**2,684.4**	**-**	**11.4**	**37.7**	**38.4**	**38.5**	**28.7**	**59.5**	**-**	**2,898.6**
Provided during the period	66.3	-	0.9	1.2	5.6	6.3	1.7	4.8	-	86.8
Disposals	(20.3)	-	-	-	(3.6)	(4.0)	(0.3)	(4.0)	-	(32.2)

Revaluation and indexation	51.6	-	0.1	0.2	(1.6)	-	0.5	(0.9)	-	49.9
Impairment	-	-	-	-	-	-	-	-	-	-
Reclassification	-	-	-	-	-	-	-	-	-	-
At 31 March 2020	**2,782.0**	**-**	**12.4**	**39.1**	**38.8**	**40.8**	**30.6**	**59.4**	**-**	**3,003.1**
Net Book Value at 31 March 2020	**2,718.5**	**45.3**	**23.5**	**30.2**	**15.3**	**21.4**	**6.5**	**15.4**	**276.7**	**3,152.8**

Details of valuation

The vast majority of the Environment Agency's assets are owned outright.

All of the Environment Agency's land and buildings (including dwellings), except assets under construction, were revalued at 31 March 2021 by the following RICS qualified external chartered surveyors: Savills and Avison Young. The valuation was on the basis of open market value for administrative land and buildings and existing use for operational land.

Intangible assets, plant and machinery, vehicles, furniture & fittings, IT equipment and operational assets were revalued internally at 31 March 2021 using suitable indices.

The impact of revaluations is shown as revaluation and indexation in notes 7 and 8 respectively for tangible and intangible assets.

The carrying amount for property, plant and equipment that would have been recognised had the assets been carried under the cost model as at 31 March 2021 was £1,320 million. The revaluation surplus as at 31 March 2021 for property, plant and equipment was £1,934.2 million.

Operational assets

Operational assets include £80.7 million (31 March 2020, £93.9 million) of land which 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 £1,183 million (31 March 2020, £1,145 million). The Thames Barrier is expected to be in operation until 2070.

As per note 1.9, the Environment Agency uses a Modified Historic Cost approach to value its operational assets, as a proxy for Depreciated Replacement Cost. This means that an appropriate annual cost inflation index is used to increase the gross book value of the assets each year. We have not undertaken any sensitivity analysis in relation to the indices used since this specific valuation methodology is subject to a qualified audit opinion.

8. Intangible assets

At 31 March 2021	Software licences	Websites	Other IT	Assets under construction	Total
Cost or valuation	£ million	£ million	£ million	£ million	£ million
At 1 April 2020	**85.9**	**75.0**	**150.0**	**49.6**	**360.5**
Capital expenditure	-	-	-	24.5	**24.5**
Assets commissioned in year	0.6	1.0	12.7	(14.3)	**-**
Disposals	(4.4)	(27.6)	(42.2)	-	**(74.2)**
Revaluation and indexation	3.2	0.8	4.7	-	**8.7**
Impairment	(0.1)	-	-	-	**(0.1)**
Reclassification	-	-	-	1.2	**1.2**
At 31 March 2021	**85.2**	**49.2**	**125.2**	**61.0**	**320.6**
Amortisation					
At 1 April 2020	**55.9**	**66.9**	**107.2**	**-**	**230.0**
Provided during the year	5.6	3.3	13.7	-	**22.6**
Disposals	(4.4)	(27.6)	(42.1)	-	**(74.1)**
Revaluation and indexation	(1.6)	(0.4)	(2.3)	-	**(4.3)**
Impairment	-	-	-	-	**-**
Reclassification	-	-	-	-	**-**
At 31 March 2021	**55.5**	**42.2**	**76.5**	**-**	**174.2**
Net Book Value at 31 March 2021	**29.7**	**7.0**	**48.7**	**61.0**	**146.4**

At 31 March 2020	Software licences	Websites	Other IT	Assets under construction	Total
Cost or valuation	£ million	£ million	£ million	£ million	£ million
At 1 April 2019	**84.8**	**81.7**	**138.8**	**42.7**	**348.0**
Capital expenditure	-	-	-	21.7	**21.7**
Assets commissioned in year	0.2	-	14.5	(14.7)	**-**
Disposals	-	(7.2)	(4.4)	-	**(11.6)**
Revaluation and indexation	0.9	0.5	1.1	-	**2.5**
Impairment	-	-	-	-	**-**
Reclassification	-	-	-	(0.1)	**(0.1)**
At 31 March 2020	**85.9**	**75.0**	**150.0**	**49.6**	**360.5**
Amortisation					
At 1 April 2019	**49.0**	**72.2**	**106.3**	**-**	**227.5**
Provided during the year	7.1	3.8	11.2	-	**22.1**
Disposals	-	(7.2)	(3.8)	-	**(11.0)**
Revaluation and indexation	(0.2)	(1.9)	(6.5)	-	**(8.6)**
Impairment	-	-	-	-	**-**
Reclassification	-	-	-	-	**-**
At 31 March 2020	**55.9**	**66.9**	**107.2**	**-**	**230.0**
Net Book Value at 31 March 2020	**30.0**	**8.1**	**42.8**	**49.6**	**130.5**

Details of valuation

The carrying amount for intangible assets that would have been recognised had the assets been carried under the cost model as at 31 March 2021 was £128.4 million. The revaluation surplus as at 31 March 2021 for intangible assets was £18 million.

9. Impairment

Impairments by Accounting Category	31 March 2021	31 March 2020
	£ million	£ million
Property, plant and equipment	-	2.2
Intangible assets	-	-
Total charged to the revaluation reserve	**-**	**2.2**
Property, plant and equipment	45.2	17.9
Intangible assets	0.1	-
Total impairment charge to the statement of comprehensive net expenditure	**45.3**	**17.9**
Total impairment as per statement of financial position	**45.3**	**20.1**

The asset categories affected by impairment can be seen in notes 7 & 8. In 2020-21 operational assets were impaired by £33.6m, freehold land £6.4m, freehold buildings £1.6m and dwellings £1.0m, this was largely indicated by the quinquennial revaluation of land and buildings as at 31 March 2021. An annual review exercise was also carried out which looked at assets with signs of reduced service potential below the carrying value due to damage, obsolescence or aborted capital projects which included assets under construction impairment of £2.8m.

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 2021	31 March 2020 Restated*
	£ million	£ million
Within one year:		
Trade receivables	32.5	31.4
Accrued income	49.7	33.7
Expected Credit Loss	(6.8)	(4.7)
	75.4	**60.4**
Other receivables:		
VAT	32.0	23.5
Employee loans	1.6	1.3
Prepayments	7.0	8.7
Total	**116.0**	**93.9**

*The 2019-20 value for Accrued income has been restated as a result of the restatement of the reservoir operating agreement liability, further details for which are disclosed in Note 16.1 Financial liability - reservoir operating agreements.

The Environment Agency has a debt recovery process to chase outstanding debt and to resolve any related disputes. Debts are only formally written-off when this process is concluded or when we become aware of a significant reason why we would not recover the debt, such as the debtor becoming insolvent. We may write-off debts in the accounts where it is prudent to, for example when an undisputed debt has been outstanding for a number of years and further pursuit does not represent value for money.

Expected credit losses have been calculated and provided for in accordance with IFRS 9, as described in note 16.

11. Cash and cash equivalents

	31 March 2021	31 March 2020
	£ million	£ million
At 1 April	131.4	108.5
Net change in cash and cash equivalent balances	(59.0)	22.9
At 31 March (as per statement of Cash Flows)	**72.4**	**131.4**

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

12. Trade, other payables and contract liabilities

	31 March 2021	31 March 2020
	£ million	£ million
Within one year:		
Other taxation and social security	(10.1)	(10.1)
Trade payables	(4.6)	(10.1)
Trade payables accrual	(103.8)	(105.6)
Holiday pay accrual	(15.2)	(7.5)
Other payables	(6.7)	(6.5)
Capital payables	(7.1)	(7.0)
Capital payables accrual	(101.0)	(80.7)
Contract liabilities:		
- Flood risk management	(80.1)	(69.6)
- Water resources – EIUC	(19.8)	(19.8)
- Environment protection	(0.7)	(3.0)
Pension contribution liabilities	(5.3)	(5.1)
Customer deposits and receipts in advance	(108.9)	(86.9)
	(463.3)	**(411.9)**
More than one year:		
Trade payables including accruals and other payables	(3.5)	(1.0)
Total	**(466.8)**	**(412.9)**

Within customer deposits and receipts in advance is £0.9 million relating to abstraction applications (2019-20, £0.0 million), £2.3 million relating to water quality applications (2019-20, £0.3 million) and £63.9 million of capital works expensed in-year income (2019-20, £58.4 million) where the contribution has been received but performance obligations have not been fully completed.

13. Transfers between reserves

13.1 For the year ended 31 March 2021

	Revaluation reserve	General reserve	Pension reserve	Total
	£ million	£ million	£ million	£ million
Realised revalued depreciation and disposals	(88.4)	88.4	-	-
Net pension charge	-	11.0	(11.0)	0.0
Total	**(88.4)**	**99.4**	**(11.0)**	**0.0**

13.2 For the year ended 31 March 2020

	Revaluation reserve	General reserve	Pension reserve	Total
	£ million	£ million	£ million	£ million
Realised revalued depreciation and disposals	(78.5)	78.5	-	-
Net pension charge	-	96.1	(96.1)	-
Total	**(78.5)**	**174.6**	**(96.1)**	**-**

14. Commitments

14.1 Capital commitments

	31 March 2021	31 March 2020
	£ million	£ million
Contracted for but not provided in the financial statements	53.0	72.3

The amounts above relate to both tangible and intangible fixed assets. Commitments on capital works expensed in year at 31 March 2021 totalled £201.1 million (31 March 2020, £302.0 million). The majority of the significant commitments relate to the construction of flood defence schemes and the largest as at 31 March 2021 was for the construction of sea defences at Lydd for £23.8 million (31 March 2020 construction of defences at Great Yarmouth £21 million).

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 2021	31 March 2020
	£ million	£ million
Not more than one year	32.0	28.0
More than one year and not later than five years	26.1	12.9
More than five years	0.0	0.0
Total	**58.1**	**40.9**

The largest commitments relate to the Broadlands flood alleviation project (£5.8 million) (2019-20, £9.0 million), Pevensey Bay beach maintenance (£7.1 million) (2019-20, £8.7 million) and an outsourced IT service contract with Capgemini (£44.2 million) (2019-20, £21.6 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 2021		31 March 2020	
	Land and buildings	Other	Land and buildings	Other
	£ million	£ million	£ million	£ million
Not more than one year	9.8	9.8	9.3	9.7
More than one year and no later than five years	23.7	6.9	24.3	9.3
More than five years	19.5	-	21.9	-
Total	**53.0**	**16.7**	**55.5**	**19.0**

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.

14.4 Risk Management Authority Grant Commitments

Payments the Environment Agency is committed to	31 March 2021	31 March 2020
	£ million	£ million
Not more later than one year	159.2	61.9
More than one year and not later than five years	253.9	184.4
More than five years	1.7	-
Total	**414.8**	**246.3**

The above value represents approved applications for grant payments to local councils, internal drainage boards (IDBs) and other risk management authorities on flood and coastal erosion risk management capital schemes, as per the expenditure type set out in notes 1.5 & 5.4. Payment is dependent on completion of works on the approved schemes.

The largest approved scheme as at 31st March 2021 was £86.6 million for coastal flood defences at Southsea (31st March 2020, £56.2 million flood alleviation scheme in Leeds).

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 Local Government Pension Scheme (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 Environment Agency Pension Fund (EAPF) including its annual report and financial statements, are on the Environment Agency Pension Fund website (www.eapf.org.uk).

The EAPF has three 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. NRW and SSCL are closed to new entrants and pay fixed contributions of a fixed sum and fixed percentage of pay respectively. The Environment Agency guarantees the SSCL contributions and so their position is modelled within the Environment Agency's for valuation and contribution setting.

Following the transfer to Defra group corporate services (note 5.1) staff needed to decide about their pension. Out of a total of 845 in scope transferees, 438 (52%) elected to transfer their deferred benefit from the EAPF into the Civil Service Pension Fund. This resulted in a transfer of £63.8 million during July 2019. Transferring liabilities were valued according to IAS 19 assumptions and increased with interest. The assets and liabilities relating to this are included in the IAS 19 disclosures below for 2019-20 in the "Effect of settlements relating to Defra Group CS" line.

The total pension charge for the Environment Agency, under IAS 19, was £109.4 million for the financial year 2020-21 (2019-20, £137.5 million). The pension charge relating to the Active Fund 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 14.5% of the monthly gross salary of members to the Active Pension Fund each month, and then pay a lump sum each year to meet the equivalent employer contribution of 19%.

The latest triennial actuarial valuation of the EAPF was at 31 March 2019. The assets taken at market value (£3.7 billion) were sufficient to cover 106% 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 to increase employer contributions by 0.5% from 18.5% to 19.0% from April 2020 through to March 2023. This was to maintain a prudent funding plan in light of uncertainties over the cost impacts of the McCloud ruling (reported in note 15.5), leaving the European Union and climate change. Markets were disrupted by COVID-19 which resulted in difficult market conditions towards the end of the year ended 31 March 2020, however the Fund's assets have now recovered very well during 2020-21 with a net asset value of over £4.2 billion.

The reported net liability has increased by around £931 million during the year ending 31 March 2021. The expected closing position liability (i.e. before changes in assumptions) was around £135 million higher than the opening position which is in line with last year. However, the vast majority of the increase in net liability has been affected by changes in financial assumptions of around £1.4 billion – mainly reductions in inflation and pension and salary increase rates as well as a slight reduction in discount rate. Assumptions on levels of commutation, withdrawal, ill-health early retirement and similar are also made and are based on recent experience of LGPS funds. The changes in financial and longevity assumptions are provided in note 15.1.

The annual report and financial statements for the EAPF estimated that it had sufficient assets to meet 111% of its expected future liabilities at 31 March 2021 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 for funding purposes is based on a prudent expectation of the return generated from the portfolio of assets 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. As at 31 March 2021, the real discount rate (discount rate net of inflation) has fallen compared to the previous year. This is due to the combination of a lower discount rate assumption and a significantly higher pension increases (Consumer Price Index) assumption. This lower rate results in a higher value being placed on liabilities.

The sensitivity analysis in note 15.4 indicates the sensitivity of the Active 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 2.5% per annum. The estimated contribution payable by the Environment Agency, excluding any discretionary lump sum payments, for the year to 31 March 2022 will be approximately £54.6 million.

These financial statements include the disclosure requirements of IAS 19 for 2020-21 in relation to the EAPF. All calculations have been made by a qualified independent actuary and are based on the most recent actuarial valuation of the Active Fund at 31 March 2019. The assumptions underlying the calculation of a net liability at 31 March 2021 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 EAPF 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 2022.

The Environment Agency is also the employing authority for the Environment Agency Closed Fund which provides benefits to members of the former Water Authorities Superannuation Fund who were either pensioners or deferred members on the privatisation of the water industry in 1989. Defra is the financial sponsor for the Closed Fund and accounts for it within its annual report and accounts.

15.1 Financial and longevity assumptions

Financial assumptions for the Environment Agency Pension Fund

	% per annum 31 March 2021	% per annum 31 March 2020
Inflation and pension increase rate	2.80	1.50
Salary increase rate	3.30	2.00
Discount rate	2.05	2.30

Longevity assumptions: average future life expectancy at age 65

Scheme member	31 March 2021		31 March 2020	
	Male (years)	Female (years)	Male (years)	Female (years)
Current pensioners	22.1	24.2	22	24
Future pensioners (people aged 65 in 20 years)	23.4	26.2	23	26

15.2 Fair value of employer assets

Fair value of employer assets at 31 March 2021

Asset category	Active market quoted prices	Non-active market quoted prices	Total	% of total
	£ million	£ million	£ million	%
Equity securities:				
Common stock	841.4	-	**841.4**	22
Other equity assets	15.1	-	**15.1**	-
Debt securities:				
UK government bonds	-	342.1	**342.1**	9
Corporate bonds	-	315.9	**315.9**	8
Other	-	21.7	**21.7**	1
Pooled investment vehicles:				
Equities	-	966.0	**966.0**	25
Bonds	-	605.5	**605.5**	16
Funds - real estate	-	131.7	**131.7**	3
Funds - venture capital	-	0.8	**0.8**	-
Venture capital and partnerships:				
Partnerships and real estate	-	484.0	**484.0**	12
Derivative contracts:				
Forward foreign exchange contracts	-	(1.1)	**(1.1)**	-
Cash and cash equivalents	-	170.7	**170.7**	4
Totals	**856.5**	**3,037.3**	**3,893.8**	**100**

Fair value of employer assets at 31 March 2020

Asset category	Active market quoted prices	Non-active market quoted prices	Total	% of total
	£ million	£ million	£ million	%
Equity securities:				
Common stock	464.6	-	**464.6**	14
Other equity assets	1.0	-	**1.0**	-
Debt securities:				
UK government bonds	-	330.4	**330.4**	10
Corporate bonds	-	282.7	**282.7**	9
Other	-	18.3	**18.3**	1
Pooled investment vehicles:				
Equities	-	725.1	**725.1**	22
Bonds	-	736.3	**736.3**	23
Funds - real estate	-	150.3	**150.3**	5
Venture capital and partnerships:				
Partnerships and real estate	-	466.0	**466.0**	14
Derivative contracts:				
Forward foreign exchange contracts	-	(4.9)	**(4.9)**	-
Cash and cash equivalents	-	77.6	**77.6**	2
Totals	**465.6**	**2,781.8**	**3,247.4**	100

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

Year ended 31 March 2021	Fair Value of Employer Assets		Defined Benefit Obligations		Net (liability)/ asset	
	£ million	£ million	£ million	£ million	£ million	£ million
Opening position as at 1 April		**3,247.4**		**(3,380.7)**		**(133.3)**
Pension benefits accrued by members during the year *	-		(109.3)		(109.3)	
Change in cost of pensions from previous years' service	-		(0.1)		(0.1)	
Total service cost (recognised in SOCNE)		**-**		**(109.4)**		**(109.4)**
Interest income on plan assets	75.2		-		75.2	
Interest cost on defined benefit obligation	-		(78.4)		(78.4)	
Total net interest (recognised in SOCNE)		**75.2**		**(78.4)**		**(3.2)**
Plan participants' contributions	25.7		(25.7)		-	
Employer contributions	101.6		-		101.6	
Benefits paid	(78.8)		78.8		-	
Total cash flows		**48.5**		**53.1**		**101.6**
Expected closing position		**3,371.1**		**(3,515.4)**		**(144.3)**
Change in financial assumptions	-		(1,400.8)		(1,400.8)	
Change in demographic assumptions	-		(62.4)		(62.4)	
Other experience	-		24.5		24.5	
Return on assets excluding amounts included in net interest	522.7		-		522.7	

Total remeasurements recognised in Other Comprehensive Expenditure	**522.7**	**(1,438.7)**	**(916.0)**
Closing position as at 31 March	**3,893.8**	**(4,954.1)**	**(1,060.3)**

The defined benefit obligation comprises approximately £2.8 billion, £0.9 billion and £1.3 billion in respect of employee members, deferred pensioners and pensioners respectively as at 31 March 2021 (31 March 2020, £1.6 billion, £0.6 billion and £1.2 billion). There are no current unfunded obligations.

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

Year ended 31 March 2020	Fair value of employer assets		Funded defined benefit obligations		Net (liability) or asset	
	£ million	£ million	£ million	£ million	£ million	£ million
Opening position at 1 April 2019		**3,337.4**		**(3,992.8)**		**(655.4)**
Pension benefits accrued by members during the year*	-		(156.9)		(156.9)	
Change in cost of pensions from previous years' service	-		10.0		10.0	
Total service cost (note 3)		**-**		**(146.9)**		**(146.9)**
Effect of settlements relating to Defra Group CS (DGCS)**	(63.8)		73.2		9.4	
Total effect of DGCS		**(63.8)**		**73.2**		**9.4**
Interest income on plan assets	79.3		-		79.3	
Interest cost on defined benefit obligation	-		(96.2)		(96.2)	
Total net interest (recognised in SOCNE)		**79.3**		**(96.2)**		**(16.9)**
Plan participants' contributions	24.6		(24.6)		-	
Employer contributions	58.3		-		58.3	
Benefits paid	(80.5)		80.5		-	
Total cash flows		**2.4**		**55.9**		**58.3**
Expected closing position		**3,355.3**		**(4,106.8)**		**(751.5)**
Change in financial assumptions	-		426.9		426.9	
Change in demographic assumptions	-		95.2		95.2	
Other experience	-		204.0		204.0	
Return on assets excluding amounts included in net interest	(107.9)		-		(107.9)	
Total remeasurements recognised in Other Comprehensive Expenditure		**(107.9)**		**726.1**		**618.2**
Closing position as at 31 March		**3,247.4**		**(3,380.7)**		**(133.3)**

The defined benefit obligation comprises approximately £1.6 billion, £0.6 billion and £1.2 billion in respect of employee members, deferred pensioners and pensioners respectively as at 31 March

2020 (31 March 2020, £2.3 billion, £0.5 billion and £1.1 billion). 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 Scheme.

15.4 Sensitivity analysis

Sensitivities regarding the principal assumptions used to measure the Funds liabilities

Change in assumption	Approximate % increase in employer liability	Approximate monetary amount £ million
0.5% decrease in real discount rate	12%	588
0.5% increase in salary increase rate	2%	109
0.5% increase in pension increase rate	9%	464

The approach taken to quantify the impact of a change in financial assumptions is to calculate and compare the value of fund liabilities at 31 March 2021 on varying bases. The approach taken is consistent with the approach to derive the other figures in this note.

Uncertainty over life expectancy was modelled considering an increase in life expectancy of one year. This is assumed to increase costs by broadly 3%. The actual cost would depend on the structure of the revised assumption (i.e. if the change affects younger or older members).

The sensitivity approach is consistent with the previous year.

15.5 IAS 19 provisions

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 Career Average Revalued Earnings (CARE) scheme by effectively giving them the better of the benefits from the old final salary scheme and new CARE scheme.

In December 2018, the Court of Appeal upheld a ruling (McCloud) 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.

At the end of 2018-19, an initial liability was recognised within the IAS 19 report of £28.3 million. In 2019-20 this reduced to £13.4 million following Ministry of Housing, Communities and Local Government (now called the Department for Levelling Up, Housing & Communities) consultation which set out qualifying member criteria. No further adjustment has been made in 2020-21.

In June 2020, a legal discrimination case (Goodwin) which related to unequal death benefit provision for male dependents of female scheme members was deemed successful. Whilst this case occurred in the Teacher’s Pension Scheme, it is relevant to other public sector schemes including the LGPS. Initial analysis suggests this will affect a very small population of our membership and may result in an increase in the cost of pensions from previous years' service, estimated at around £3.4 million. For completeness this was included in our 2019-20 IAS 19 valuation with no further adjustment made in 2020-21 as there are no new details on the potential remedy for the Goodwin case.

There are two further court cases which may impact on the benefits of the scheme (Walker and O'Brien). Our current understanding is that these are unlikely to be significant judgements in terms of the impact on the pension obligations. As a result, and until further guidance is released, we have not made any allowance for the potential remedies to these judgements or no changes have been made to the existing benefits structure.

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 four financial years, updated for any known future credit issues. See Note 10 for an explanation of our debt recovery process. Where the pandemic led to higher levels of default on more recent invoices, the expected credit loss calculation was increased to reflect the increased expected credit loss on those charge schemes. An adjustment was also made in respect of the further impact of the pandemic. There has not been a material change in the expected credit losses for any charge scheme.

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 payments for a return on investment in the reservoir assets, 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 return on asset 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	Finance Charge 2019-20	Amounts paid in 2019-20	Liability at 31 March 2020	Finance Charge 2020-21	Amounts paid in 2020-21	Liability at 31 March 2021	Liability at 31 March 2021 – Due within 1 year	Liability at 31 March 2021 – Due later than 1 year
	£ million	£ million	£ million	£ million	£ million	£ million	£ million	£ million
Northumbrian Water	(25.4)	19.0	(317.2)	(23.8)	19.2	(321.8)	(19.6)	(302.2)
Severn Trent Water	(3.5)	1.8	(87.1)	(2.5)	1.9	(87.7)	(1.9)	(85.8)
Total	**(28.9)**	**20.8**	**(404.3)**	**(26.3)**	**21.1**	**(409.5)**	**(21.5)**	**(388.0)**

The largest payments are payable to Northumbrian Water (in relation to Kielder and Cow Green reservoirs) and Severn Trent Water (in relation to Lake Clywedog and Lake Vyrnwy reservoirs). The liabilities are initially recognised at fair value and subsequently measured at amortised cost and are measured as perpetuities. The effective interest rate method is used to calculate the amortised cost and the interest expense (the finance charge in the table above). The method involves calculating the net present value of the estimated future cash flows discounted at the internal rate of return. The effective interest rate is recalculated each year which reduces the impact of variation in the RPI.

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. We have carried out a sensitivity analysis to ascertain the responsiveness of the liability to changes in the RPI index. If we change the RPI assumption for every year in the future by +1% or -1% then the value of the liability (and the cost in 2020-21) increases or decreases by £4.026 million.

Details of prior period adjustment

In previous years the financial liability was calculated as a perpetuity with a fixed discount rate. This treatment meant the financial liability remained at the same calculated value at each reporting period end and the cost reported in the accounts was only the annual contractual amount paid to the respective water companies. This method did not reflect the full financing cost under the effective interest method and as such the valuation of the liability has not previously been compliant with IFRS 9.

The accounting method has been updated to the effective interest rate method described above and the financial liability has been recalculated back to the inception of the agreements in 1989. The restated values are shown in the table above and in the Statement of Financial Position.

The impact of this change on the financial liability has been an increase of £262.7 million to the figures previously quoted as at 31 March 2020, and an increase of £254.6 million for the figure previously quoted as at 1 April 2019. The finance charge for 2019-20 recognised in the Statement of Comprehensive Net Expenditure increased by £8.1 million (£12.2 million in 2018-19) (note 5.3). The increase in the finance charge has been reflected in the 2019-20 abstraction charge expenditure (Table 15 in the Parliamentary accountability and audit report). The impact on the abstraction charges income figure for 2019-20 has been an increase of £8.1 million (note 6). The impact on the accrued income figure previously quoted as at 31 March 2020 has been an increase of £8.1 million (note 10). Consequently, the impact on the general reserve has been an increase of £254.6 million for the figures previously quoted as at 31 March 2020 and as at 1 April 2019.

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	2020-21	2019-20
	£ million	£ million
Defra environment protection grant-in-aid	(94.3)	(75.6)
Defra flood defence grant-in-aid	(836.1)	(688.2)
Defra IDB or local authority grant-in-aid	(119.6)	(116.2)
Total	**(1,050.0)**	**(880.0)**

17.2 Defra group corporate services

The property portfolio of the Defra group was managed centrally by Defra during the whole of 2020-21 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 5.1).

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. Defra charged the Environment Agency £44.5 million (2019-20, £54.3 million) 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 2020-21 provided fleet management services to Defra, NE, RPA and APHA with a cost of £0.2 million. This service provision provides economy of scale efficiencies on safety, sustainability and procurement for the group as a whole.

17.3 Other related parties

The Environment Agency keeps a fully updated Register of Interests. During the year, the Agency had transactions with organisations for which Board members or Executive Directors have declared a related party interest as shown in the below table:

Board member/Executive Director	Related body	Payments made in 2020-21	Income received in 2020-21	Outstanding Payable balance as at 31 March 2021	Outstanding Receivable balance as at 31 March 2021
		£ million	£ million	£ million	£ million
Maria Adebowale-Schwarte	Canal and Rivers Trust	0.8	2.5	-	0.4
Ines Faden da Silva	Thames Tideway (Bazalgette Tunnel Limited)	-	1.1	-	0.3
Lynne Frostick	Beverley and North Holdnerness IDB	0.3	0.2	-	-

No Board member nor Executive Director has undertaken any transaction with the Environment Agency for which they have not declared an interest. The Remuneration and staff report provides further information on Board members and Executive Directors.

In addition to the above disclosures, Emma Howard Boyd, the Environment Agency's Chair is an ex-officio member of the Defra board, our parent department which provides the majority of the Environment Agency's funding.

Toby Willison left his role as Executive Director of Operations in November 2020 to join Southern Water as Natural Capital and Environment Director. The safeguards put in place in relation to this departure are outlined in the Governance Statement. The Environment Agency had normal business transactions with Southern Water in 2020-21 totalling £0.2m payments made and £9.3m income received.

The Environment Agency is the administering authority responsible for maintaining and managing the Environment Agency Pension Fund. The Environment Agency charged the fund £0.7m for expenses incurred in administering the Fund.

Following Government recommendations to pool the management and investment of pension scheme assets, the Environment Agency and 9 other partner LGPS funds are shareholders in, and working together with, Brunel Pension Partnership Ltd to realise savings and efficiencies. Environment Agency Board member Robert Gould is also Chair of the Brunel Oversight Board.

In September 2019, the Environment Agency entered into a collaborative agreement with the Esmee Fairbairn Foundation to explore how private finance investment could be achieved at scale to enable environmental problems to be addressed. As part of the collaboration, the Environment Agency invested £309k across four initial Investment Readiness Projects in 2019-20 in order to develop, test and evaluate new models for investing in the environment and learn how these models could be applied more widely. £125k of this investment was funded by Defra via grant-in-aid. There was no further cash investment in the projects in 2020-21. Environment Agency Board members Caroline Mason and Judith Batchelar are the Chief Executive Officer and Commissioner respectively of the Esmee Fairbairn Foundation.

The Environment Agency has one Internal Drainage Board which is under common control (see note 1.20).

In addition, the Environment Agency has had various material transactions with other government departments and other public bodies. Most of these transactions have been with HMRC, Leeds City Council and Portsmouth City Council.

18. 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 on pages 77 to 81.

COVID-19 pandemic

The disruption to the Environment Agency's activities and finances as a result of the COVID-19 pandemic and related restrictions was significant during 2020-21. However, the adjustments made within the Environment Agency, and by its customers over the past 18 months, and the beneficial impact of the national vaccination programme, mean that any reintroduction of restrictions is not expected to have a material impact on the Environment Agency's finances in the 2021-22 financial year. The delivery of some projects may be delayed, and there may be an increase in bad debts when government support to the economy winds down in coming months, but this has been included in our calculations for expected credit losses.

Pension liability

As shown in note 15.4, the pension fund liabilities are sensitive to changes in the discount rate and the figures presented in the accounts are based on the assumptions as at 31 March 2021. The discount rate is determined with reference to market yields on high quality corporate bonds at the reporting date as per IAS 19.

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 2021, 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 & Industrial Strategy and the Ministry of Housing, Communities and Local Government (now called the Department for Levelling Up, Housing & Communities). 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)

In 2020-21, we have not purchased any offsets. We have focussed on driving our emissions down as outlined in our performance report. As we progress towards net zero by 2030, we may purchase some offsets and are currently developing our strategy for this area.

Emissions, energy and business travel	Unit	2018-19	2019-20	2020-21
Direct emissions (Scope 1)	tCO_2e	10,000	10.000	7,000
Emissions from purchased energy (Scope 2)	tCO_2e	16,000	17,000	13,000
Emissions produced by our suppliers (Scope 3)	tCO_2e	9,000	9,000	5,000(i)
Total gross emissions	**tCO_2e**	**35,000**	**36,000**	**25,000**
Carbon intensity (per £ million expenditure)	**tCO_2e**	**26**	**22**	**16**

(i) Figure to be uplifted as more data comes in throughout the year.

Business travel	Unit	2018-19	2019-20	2020-21
Car and motorbike	**tCO_2e**	7,598	7,613	4,359
Rail	**tCO_2e**	1,277	1,122	50
Air	**tCO_2e**	136	181	2
Total business travel	**tCO_2e**	**9,011**	**8,916**	**4,411**
	£ million	**21**	**24**	**14**
Travel carbon intensity per full-time employee	**tCO_2e**	**0.9**	**0.8**	**0.4**

Office waste	Unit	2018-19	2019-20	2020-21
Landfill	Tonnes	2.4	1.5	0.1
	£	18,000	14,000	13,000
Reused or recycled	Tonnes	316	200	57
Incinerated to produce energy	Tonnes	18	14	20
Reused, recycled or incinerated	£	261,000	196,000	180,000
Reused or recycled electronic or electrical equipment	Tonnes	22	19	2
Total office waste	**Tonnes**	**358**	**235**	**79**
	£	**279,000**	**210,000**	**193,000**
Waste intensity per full time employee	**kg**	**30**	**28**	**8**

Pension fund investment	Unit	2018-19	2019-20	2020-21
Pension fund assets	£ million	3,337	3,246	3,887
Investments in clean & sustainable technology	%	39	31[(i)]	18[(i)]
Carbon footprint	tCO_2e per £ million	204	177	162

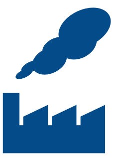
(i) In future, we would like to be able to report all assets in line with the UK and/or EU taxonomies for sustainable finance. For that reason, since 2019, we have tightened our classification yearly, to be as comparable as possible with what we expect in these forthcoming taxonomies. This has resulted in a drop from 2018/19 reporting from 39% to 31%. As well as a drop from 31% in 2019/20 to 18% in 2020/21.

Resource consumption	Unit	2018-19	2019-20	2020-21
Purchased gas and purchased renewable electricity	million kWh	62	66	58
	£ million	7.3	7.3	7.3
Self-generated renewable energy	million kWh	0.6	0.5	0.4
Water supplied	Cubic metres	48,473	41,603	23,065
	£	265,000	230,000	139,000
Paper from renewable or recycled sources	Reams	25,000	20,000	2,000
	£	3,000	3,000	500

Appendix C: Performance data

(Not subject to audit)

https://www.gov.uk/government/collections/environment-agency-corporate-scorecard

Infographic	Primary SDG	Success measure	Units	2020-21 target	2020-21 actual
	13 CLIMATE ACTION	A1a We reduce the risk of flooding for more households	Number of households better protected	300,000	314,361
	13 CLIMATE ACTION	A1b We maintain our flood and coastal risk management assets at or above the target condition	% of high risk assets at target condition	98.0%	94.5%
	13 CLIMATE ACTION	A2 We will deliver our strategic adaptation actions to tackle the climate emergency	% of adaptation actions on track	90% minimum	72%
	3 GOOD HEALTH AND WELL-BEING	A3 We have a first class incident response capability Number of staff who are trained and ready to respond to incidents	Number of people	6,000	6,408
	13 CLIMATE ACTION	A4 Air quality is improving - Monitor the reductions across 5 priority pollutants: NOX, SOX, NMVOC, NH3 and Particulates in the refineries sector	% Reduction, grams per tonne	<431 SOX <203 NOX	421.56 SOX 236.24 NOX
	14 LIFE BELOW WATER	A5 Our rivers and coasts have better water quality and are better places for wildlife. Measure: kilometres of the water environment enhanced	Kilometres	3,900	4,551

A6 We increase biodiversity and promote an environmental net gain by creating more and better habitats for the benefit of people and wildlife	Hectares created & hectares restored	1,200	1,897
A7 We successfully influence planning decisions by local authorities	% decision notices successfully influenced	97.0%	98%
A8 We reduce the number of high risk illegal waste sites	Number of high risk illegal waste sites	216	206
A9 We reduce our carbon footprint	Tonnes of carbon dioxide	28,780	21,406
EO1 We manage our money efficiently to deliver our outcomes	% spend to budget	100%	101%
EO2 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%	4.5%
EO2 We have a diverse workforce: b) The proportion of our executive managers who are female	% of workforce	50%	44%
EO3 We have the lowest possible lost time incident (LTI) frequency rate	LTI frequency rate per 100,000 hours worked	0.11	0.10

Appendix D: Board member attendance

(Not subject to audit)

Member	Board	ARAC	PC	PCISC	FCRM	EB	PPC
Emma Howard Boyd (Chair)	12 of 12	-	5 of 7	4 of 5	-	-	5 of 5
Richard Macdonald (Deputy Chair)	11 of 12	5 of 5	-	-	6 of 6	-	5 of 5
Maria Adebowale-Schwarte	10 of 12	-	-	-	-	2 of 3	5 of 5
Caroline Mason	10 of 12	-	7 of 7	3 of 5	-	3 of 3	-
Judith Batchelar	10 of 12	4 of 5	-	-	-	2 of 3	-
Lynne Frostick	11 of 12	-	-	-	6 of 6	-	-
Robert Gould	12 of 12	5 of 5	7 of 7	5 of 5	6 of 6	-	5 of 5
John Lelliott	12 of 12	5 of 5	7 of 7	-	5 of 6	-	-
John Varley	10 of 12	-	-	-	-	3 of 3	-
Gill Weeks	9 of 10	4 of 5	-	-	-	3 of 3	5 of 5
Ines Faden da Silva	3 of 3	1 of 1	-	-	1 of 2	-	-
Lilli Matson	3 of 3	-	-	-	2 of 2	-	-
Stewart Davies	3 of 3	1 of 1	-	-	-	0 of 0[2]	1 of 1

Board – Twelve meetings in 2020-21

ARAC – Member of Audit and Risk Assurance Committee – five meetings in 2020-21

PC – Member of Pensions Committee – seven meetings in 2020-21

[2] Stewart Davies was appointed to the board on 1 February 2021 and is a member of the Environment and Business Committee although no meetings were held between his appointment and 31 March 2021.

PCISC – Member of Pensions Investment Sub Committee – five meetings in 2020-21

FCRM – Member of Flood and Coastal Risk Management Committee – six meetings in 2020-21

EB – Member of Environment and Business Committee – three meetings in 2020-21

PPC – Member of People & Pay Committee – five meetings in 2020-21

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