JBA TRUST LIMITED

England & Wales · Charity number 1150278

Details

Status	Registered
Legal form	Charitable company
Company number	07840801
Registered	2012-12-21
Register	View on the Charity Commission register

Contact

Address	JBA Trust Ltd. 1 Broughton Park Old Lane North Broughton Skipton BD23 3FD
Phone	01756799919
Email	info@jbatrust.org
Website	www.jbatrust.org

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Activities

Objects: 4.1 TO ADVANCE THE SCIENCE AND PRACTICE OF "WATER AND ENVIRONMENTAL RISK AND RESOURCE MANAGEMENT" (WHICH EXPRESSION SHALL INCLUDE, WITHOUT LIMITATION, THE DEVELOPMENT AND APPLICATION OF ENGINEERING OR SCIENTIFIC KNOWLEDGE AND EXPERTISE RELEVANT TO THE PROVISION OF POLICIES, WORKS AND SERVICES DESIGNED TO FURTHER THE BENEFICIAL MANAGEMENT, CONSERVATION AND IMPROVEMENT OF THE ENVIRONMENT, VIA MANAGEMENT OF ENVIRONMENTAL RISKS AND RESOURCES, INCLUDING THEIR DEVELOPMENT, USE AND CONSERVATION) FOR THE PUBLIC BENEFIT.4.2 TO PROMOTE EDUCATION, TRAINING, STUDY AND RESEARCH IN THE SCIENCE AND PRACTICE OF WATER AND ENVIRONMENTAL RISK AND RESOURCE MANAGEMENT (INCLUDING WITHOUT LIMITATION OF THE FOREGOING, THE PROVISION OF SCHOLARSHIPS, GRANTS, SPONSORSHIP AND FUNDING IN THIS BEHALF AND THE PUBLICATION OF RESEARCH) FOR THE PUBLIC BENEFIT.4.3 TO PROMOTE THE SCIENCE OF WATER, ENVIRONMENT AND RISK MANAGEMENT FOR THE PUBLIC BENFIT, PARTICULARLY, BUT NOT EXCLUSIVELY, BY THE ENCOURAGEMENT OF EDUCATION, TRAINING, STUDY AND RESEARCH IN WATER AND ENVIRONMENTAL RISK MANAGEMENT AND TO ADVANCE EDUCATION OF MEMBERS OF THE PUBLIC IN THE SCIENCE AND PRACTICE OF WATER AND ENVIRONMENTAL RISK MANAGEMENT.4.4 TO ADVANCE THE EDUCATION OF THE PUBLIC IN THE SCIENCE, ENGINEERING AND MANAGEMENT OF WATER RESOURCES, NATURAL PERILS, WATER TREATMENT, WATER SUPPLY AND USE OF WATER, THE COLLECTION, TREATMENT AND RE-USE OF WASTEWATERS, THE NATURAL ENVIRONMENT IN GENERAL AND RELATED SUBJECTS.4.5 TO PROMOTE TO THE PUBLIC THE SCIENCE AND SCIENCE OF RENEWABLE ENERGY AND THE SUSTAINABLE USE OF NATURAL RESOURCES, PARTICULARLY, BUT NOT EXCLUSIVELY, BY THE ENCOURAGEMENT OF EDUCATION, TRAINING, STUDY AND RESEARCH IN RENEWABLE ENERGY AND SUSTAINABLE RESOURCE MANAGEMENT.

Activities: The JBA Trust supports and promotes scientific research, education and training in the fields of environmental risks and resources, with a particular focus on water.We work with leading academic researchers and other charities to create opportunities for research-based project placements and to support students and courses in higher education.

Classification

- **How:** Makes Grants To Individuals, Makes Grants To Organisations, Provides Services, Provides Advocacy/advice/information, Sponsors Or Undertakes Research, Acts As An Umbrella Or Resource Body
- **What:** Education/training, Arts/culture/heritage/science, Environment/conservation/heritage
- **Who:** Other Charities Or Voluntary Bodies, The General Public/mankind

Geography

- Throughout England And Wales

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Finances

Period end	Income	Expenditure	Assets	Employees
2025-10-31	£222,671	£248,756	-	-
2024-10-31	£199,092	£231,804	-	-
2023-10-31	£155,942	£217,214	-	-
2022-10-31	£184,564	£223,464	-	-
2021-10-31	£212,976	£234,466	-	-
2020-10-31	£181,401	£159,446	-	-

Trustees

Name	Role	Appointed
Akhila Potluru		2026-01-14
Dr Adrian Hines		2026-01-14
Dr ROBERT LAMB		2012-01-11
JEREMY RICHARD BENN		2012-01-11
Joanne Claire Coles		2023-11-23
PROFESSOR JAMES WILLIAM HALL		2012-01-11
Professor Peter Jimack		2023-11-23

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JBA TRUST LIMITED

England & Wales - Charity number 1150278

Accounts

Company Registration Number: 07840801
Charity number: 1150278

JBA TRUST LIMITED

(A company limited by guarantee)
UNAUDITED
FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 OCTOBER 2025

ArmstrongWatson®
Accountants, Business & Financial Advisers

JBA TRUST LIMITED
(A company limited by guarantee)

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JBA TRUST LIMITED

(A company limited by guarantee)

REFERENCE AND ADMINISTRATIVE DETAILS OF THE COMPANY, ITS TRUSTEES AND ADVISERS FOR THE YEAR ENDED 31 OCTOBER 2025

Trustees
Rob Lamb
Jeremy Benn
Jim Hall
Keith Beven (resigned 31 May 2025)
Nick Russell (resigned 13 November 2025)
Joanne Coles
Peter Jimack
Adrian Hines (appointed 14 January 2026)
Akhila Potluru (appointed 14 January 2026)

Company registered number

07840801

Charity registered number

1150278

Registered office

1 Broughton Park, Old Lane North, Broughton, Skipton, North Yorkshire, BD23 3FD

Company secretary

C Robson

Independent examiners

Armstrong Watson Audit Limited, Number 3, Acorn Business Park, Airedale Business Centre, Skipton, North Yorkshire, BD23 2UE

JBA TRUST LIMITED

(A company limited by guarantee)

TRUSTEES' REPORT
FOR THE YEAR ENDED 31 OCTOBER 2025

The Trustees present their annual report together with the financial statements of the company for the 1 November 2024 to 31 October 2025. The Trustees confirm that the Annual Report and financial statements of the company comply with the current statutory requirements, the requirements of the company's governing document and the provisions of the Statement of Recommended Practice (SORP), applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) as amended by Update Bulletin 1 (effective 1 January 2015).

a. GOING CONCERN

The financial statements have been prepared on the going concern basis. This is based on the continued financial support of its sponsors and creditors, which is confirmed at regular intervals, allied to the maintenance of a robust reserves policy.

TRUSTEES' RESPONSIBILITIES STATEMENT

The Trustees (who are also directors of JBA Trust Limited for the purposes of company law) are responsible for preparing the Trustees' report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

Company law requires the Trustees to prepare financial statements for each financial year. Under company law the Trustees must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the charitable company and of the incoming resources and application of resources, including the income and expenditure, of the charitable company for that period. In preparing these financial statements, the Trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP;
- make judgments and accounting estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue in operation.

The Trustees are responsible for keeping adequate accounting records that are sufficient to show and explain the charitable company's transactions and disclose with reasonable accuracy at any time the financial position of the charitable company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

This report was approved by the Trustees, on 20/04/2026 and signed on their behalf by:

R Lamb

R Lamb (Apr 20, 2026 10:53:04 GMT+1)

Rob Lamb, Managing Director

Director's Report

It has been a productive year for the JBA Trust, with new and continued collaborations across research, learning and practice. We continue to build our community of practice for physical models, helping educators and practitioners share ideas and resources that bring water and climate resilience concepts to life. Demand for interactive models is still high, reinforcing the importance of shared learning and open access to technical expertise.

We have deepened several partnerships with universities and research centres, supporting doctoral training and specialist skills development in areas critical to climate risk management. Research training through doctoral programmes takes time, and so it was very satisfying to celebrate the successes of early career doctoral candidates who have received our support through sponsorship and knowledge exchange placements. Our long-term commitment to doctoral training continues, and we were delighted to start new projects exploring flood risk modelling, community resilience and changing weather patterns. We also maintained our bursary and scholarship programmes to help postgraduate students access advanced training.

Our research outputs reflect a strong year with peer-reviewed papers, new tools to map evidence on nature-based solutions, and a Maths for Humanity knowledge exchange catalyst to connect mathematicians and hydrologists. Artificial Intelligence remains a major theme, with contributions to studies on model transparency and the behaviour of large language models, and through initiatives exploring AI's role in adaptive pathways for environmental decisions.

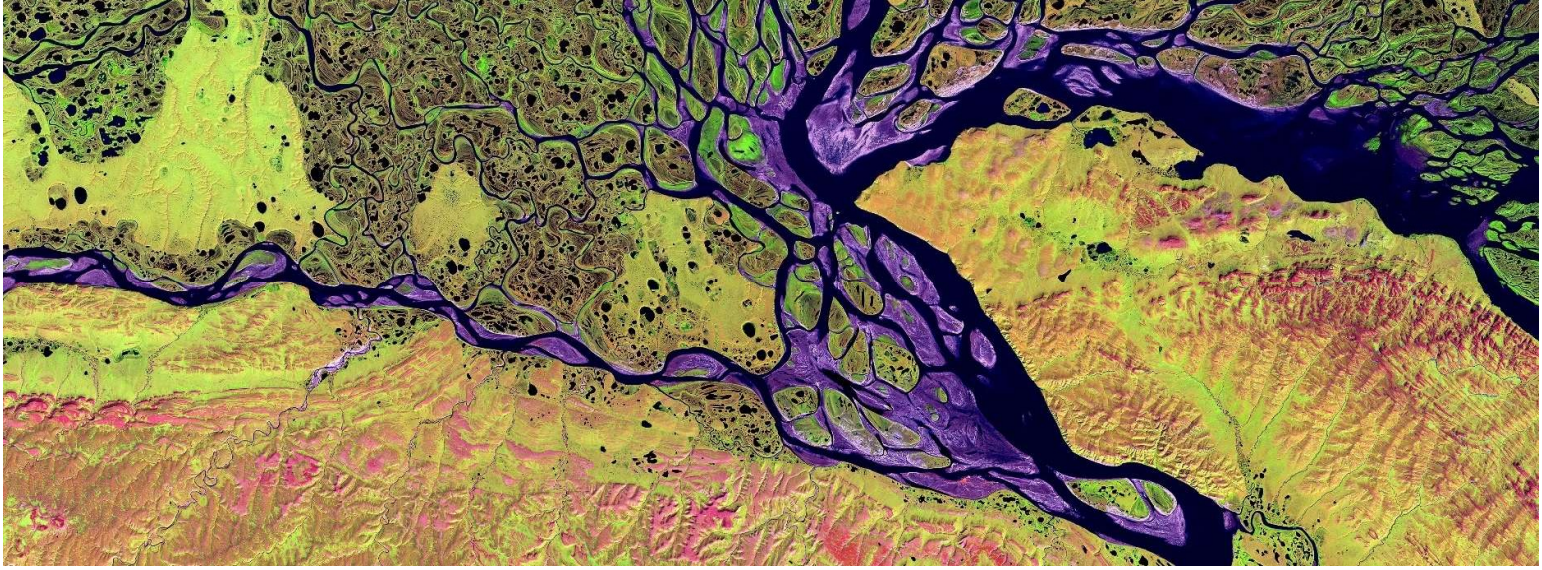
Engagement activities reached large communities of learners and educators through projects such as Future Climate Engineers, TeenTech, and the Morecambe Bay Curriculum. We co-created resources for schools, delivered water safety workshops with fire and rescue teams, and supported science festivals with dedicated volunteers. These efforts, alongside new digital resources like the Coastal Resilience Challenge game, reflect our commitment to inspiring the next generation and encouraging participation.

I am grateful for the continued support and guidance of our trustees, for the funding and in-kind support donated by the JBA Group of companies, and for the many contributions made by our colleagues.

R Lamb
R Lamb (Apr 20, 2026 10:53:04 GMT+1)

Rob Lamb, Managing Director

20/04/2026



Our purpose and activities

JBA Trust is a charity established and funded by the JBA Group of companies.

We support research and promote the shared learning and skills in climate resilience and risk management in the water cycle.

We work with academic researchers, NGOs, charities and public sector organisations to

- facilitate collaboration between academia and industry to deliver high quality scientific research
- publish and share knowledge
- enhance learning and skills by supporting specialist post-graduate training
- engage with educators, charities and voluntary groups to create, develop and share learning resources.

This annual report reviews the activities of the JBA Trust over the past year and how our work has delivered public benefit.



Science and research collaboration

We facilitate collaboration between the academic research and practice communities, connecting people and ideas. By publishing and sharing research outputs, we enable knowledge exchange and share emerging understanding of best practice.

This year, we continued to work with universities, research institutions, public sector and charitable organisations. Some of the highlights and outputs of our collaborative research projects are summarised here.

Mathematics Knowledge Exchange Catalyst

We have been working with Dr Phil Trinh from the Department of Mathematical Sciences at the University of Bath to bring together the mathematical and flood modelling communities to improve flood hydrology. The project 'Upstream insights to downstream benefits' aims to help both researchers and practitioners understand the role of mathematical analysis to support decision making in flood risk applications.

Over the year we have hosted Dr Trinh to share examples of real applications of mathematical modelling in hydrology and have explored how mathematics can be applied to provide insights about the behaviour, calibration and robustness of rainfall-runoff models.

The project has supported two student mathematics projects and in our reporting year 2024-25 we planned to connect the research and practice communities at a knowledge exchange and scoping workshop in Bath.

The collaboration has benefitted greatly from funding by the Knowledge Exchange Catalyst programme at the International Centre for Mathematical Sciences.

Explore: KE Catalysts for Humanity

Mapping scientific evidence about working with nature to reduce flood risk

Working with natural processes can help to protect, restore and emulate the natural functions of river basins, floodplains and coasts to reduce flood risk whilst providing other benefits. This concept of working with nature is sometimes also called Nature-based Solutions (NbS) or Natural Flood Management (NFM).

This year, we published a new database and interactive maps that show places that have been mentioned in research studies about working with nature published between 2017 and 2023.

Our aim was to build up a geographical overview of the literature that can be explored spatially, recognising that NbS are inherently place-based and that research findings may be specific to a particular locale or geography.

Explore: NbS NFM Research Literature Map

MARS: Mathematics for AI in Real-world Systems

MARS (Mathematics for AI in Real-world Systems) is a centre for research and teaching in mathematics underpinning applications of Artificial Intelligence (AI) to real-world systems.

We worked with MARS to host a workshop in June 2025 on the topic “Can AI help us formulate adaptive pathways for decisions about the environment?”. We were delighted to contribute the keynote presentation at the first MARS showcase event in September 2025, discussing the role of AI in climate resilience.

Explore: MARS: Mathematics for AI in Real-world Systems

UK Flood Hydrology Roadmap

The flood hydrology roadmap is a 25-year vision and plan to advance all aspects of flood hydrology in the United Kingdom. It was developed with inputs from more than 270 individuals from 50 organisations working in hydrology, flood management and related topics. We have supported the roadmap project since it started in 2018 through membership of its steering group and by contributing to publications and presentations.

We have continued supporting the roadmap through contributions to the Science and Technical Advisory Group, and by providing specific advice for projects developing within the Environment Agency’s Flood Hydrology Improvements Programme.

Explore: UK Flood Hydrology Roadmap



Doctoral training and research

Our collaboration with universities across the UK enables us to support graduate researchers (research students) working on doctoral projects to develop advanced skills and deliver high quality research that helps enhance the understanding of a wide range of risks in the water environment. We support doctoral researchers through a variety of programmes including doctoral training centres funded by UK Research and Innovation (UKRI).

This year, we supported 11 PhD students and were delighted to see two of our graduate researchers successfully complete their PhDs:

- **Freya Muir**, studying at the University of Glasgow, developed an operational framework for predicting coastal change, using machine learning techniques that are trained with satellite observations.
- **Luke Jenkins**, studying at the University of Southampton, explored the impact that sequences of storm events have on the dynamic response of hard and soft coasts and the subsequent impact on communities living in the coastal zone.

Information about all our PhD projects can be found here: Early career researchers

PhD project outputs

We are pleased to be able to share this year's peer-reviewed publications from the projects.

Tharindu Manamperi, studying at Swansea University, published a paper in Coastal Engineering on *'Predicting shoreline changes using deep learning techniques with Bayesian Optimisation'.* Tharindu found that deep learning techniques have the potential to reliably predict shoreline change. Tharindu's research also highlighted the importance of data quality and resolution in improving the performance of the models.

The paper is available here: https://doi.org/10.1016/j.coastaleng.2025.104856

Luke Jenkins published a paper in Natural Hazards on "*Assessing the temporal clustering of coastal storm tide hazards under natural variability utilising a near 500-year model run*". Luke's research provides evidence for how often consecutive storms, big waves or high tide events occur over a short period of time (known as clustering) around the UK. For example, for storm surges and still sea levels, the North Sea has the lowest proportion of clustering, whereas the North Atlantic and Bristol Channel have the highest. This will help coastal stakeholders evaluate the threat of surges, waves, and sea levels clustering over short periods.

The paper is available here: https://doi.org/10.1007/s11069-022-05617-z

Support for Doctoral Education

We work closely with university partners to support the specialist doctoral-level research training in themes of climate resilience, uncertainty and risk, and the underpinning data science that supports evidence-led decision making about the environment.

As well as helping to identify knowledge gaps and needs within these themes, we actively engage with programmes funding doctoral research to support research students by providing co-funding, technical supervision and placements.

We have engaged with the following programmes:

- Fluid Dynamics CDT (University of Leeds)
- STOR-i: Statistics and Operational Research CDT (Lancaster University)
- FLOOD-CDT (Southampton, Loughborough, Bristol)
- UNRISK: Understanding Uncertainty to Reduce Climate Risks CDT (Leeds, UCL, Exeter)
- SAMBa CDT (University of Bath)
- ExaGEO DLA (Glasgow, Edinburgh, Lancaster)
- Scenario DTP (Reading)
- IAPETUS DTP (Durham, Heriot Watt, Glasgow, Newcastle, St Andrews, Stirling)
- INSPIRE DTP (Southampton)
- i-RISK DLA (Loughborough, Newcastle, Manchester, British Geological Survey)



Research publications

During the year, we supported and co-authored six studies published as papers in peer-reviewed scientific journals.

Title and link	Journal	Authors
Global sensitivity analysis of large-scale flood loss models	EGUsphere	Pianosi, F., Sarailidis, G., Styles, K., Oldham, P., Hutchings, S., Lamb, R., and Wagener, T.
Are LLM Belief Updates Consistent with Bayes' Theorem?	ICML 2025	Imran, S., Kendiukhov, I., Broerman, M., Thomas, A., Campanella, R., Lamb, R., & Atkinson, P. M.
Predicting shoreline changes using deep learning techniques with Bayesian Optimisation	Coastal Engineering	Manamperi, T., Rahat, A., Pender, D., Cristaudo, D., Lamb, R., Karunarathna, H.
Stress-Testing Road Network in Great Britain with Historical Flood Events between 1953-2024.	Transportation Research D	Li, Y., Pant, R., Russell, T., Thomas, F., Hall, J., Oldham, P., Lamb, R., Young, P.
Assessing the temporal clustering of coastal storm tide hazards under natural variability utilising a near 500-year model run	Natural Hazards	Luke Jenkins, Ivan Haigh, Hachem Kassem, Douglas Pender, Jenny Sansom, Rob Lamb, Tom Howard
Characteristics of gauged abrupt wave fronts (walls of water) in flash floods in Scotland	HESS	Archer, D. R. and Fileni, F. D. M. and Watkiss, S. A. and Fowler, H. J.



Support for postgraduate students

There are many academic subjects that generate the knowledge and understanding needed to tackle complex environmental challenges. Undergraduate courses are important and provide a strong foundation, however there is a greater focus on specialist skills and advanced knowledge at postgraduate level. We therefore prioritise funding and resources for students and projects at this stage.

The British Hydrological Society and JBA Trust Studentship Awards

In 2024-25 we continued our partnership established in 2011 with the British Hydrological Society (BHS) to support students working towards MSc (or equivalent level) qualifications in hydrology, water resources, catchment management and other related subjects. Graduates of master's courses play a vital part in the future management of the water environment.

We awarded five bursaries of £2,800 and have now made awards to 118 students at 25 different UK universities since 2011.

Flood and Coastal Risk Management Scholarships

The challenges of more frequent extreme weather and new flood risk responsibilities mean that there is a growing need for skilled water and environmental risk management professionals.

Since 2014, we have funded 19 scholarships for Lancaster University's Flood and Coastal Risk Management Postgraduate Certificate course. We continued our support this year to help individual recipients bring benefits to communities through third sector or public sector organisations.

We made one scholarship award to Emily Andre, a Flood Engineer in the Flood Risk Management Team at North Yorkshire Council. The scholarship will fully fund the course fees of £6,040.



Learning and engagement activities

We support a wide range of activities aimed at encouraging students at schools and universities to develop or enhance their interests in water and environmental management, which could also ultimately lead them to pursue careers in the field. Our learning and engagement activities also extend to the wider community, and to flood risk management professionals.

STEM partnerships

STEM is science, technology, engineering and maths. This year, we focused on developing partnerships with organisations that have strong relationships with local communities or have a well-established outreach and engagement track record. We worked with many different organisations to co-develop learning resources and deliver activities to support STEM engagement, enabling us to utilise our resources effectively and reach diverse communities.

Diversifying participation in STEM remains a key challenge within the water and environmental management sector, and we continued to use the ‘STEM Equity Compass’ tool in our outreach and engagement activities to help us improve the inclusivity and equity of our informal STEM learning offer.

We supported the ‘Plugging the Leaks’ project with the University of Southampton as part of NERC’s Opening up the Environment programme. The programme aims to support the environmental science community to increase diversity of representation and attract a wider talent pool to contribute to tackling environmental challenges. The project will develop and evaluate interventions that reduce barriers to studying environmental science degree subjects for underrepresented students as they progress from GCSEs to A-Levels (and equivalents), into university and beyond.

Future Climate Engineers

Future Climate Engineers is an engineering design challenge for Key Stage 3 (KS3) students to explore how flood risk can be managed in a changing climate. Over 60 students attended interactive workshops hosted at the University of Leeds to learn about fluid dynamics in the environment and flood risk management. We trained PhD students from the Fluid Dynamics CDT and water professionals to enable them to deliver wave tank and river flume outreach activities.

The KS3 students applied what they learnt in the workshops to develop their own designs for a flood risk demonstrator to be built at an outdoor education centre, Nell Bank, which welcomes over 24,000 children from the local area each year. The centre will use the model as part of their River Studies workshops to help primary age students learn about the water cycle and water risks.

We enjoyed supporting the KS3 design teams and, following mentoring and visits to the schools, awarded well-deserved prizes to the teams with the most sustainable and innovative designs.

Future Climate Engineers is led by the Leeds Institute for Fluid Dynamics with support from JBA Trust, Arup, the Environment Agency and Nell Bank. It is funded by the University of Leeds UKRI Higher Education Innovation Funding (HEIF) scheme.

Morecambe Bay Curriculum

The Morecambe Bay Curriculum (MBC) project is a community-curated, place-based approach to learning about sustainability. MBC is supported and delivered by teachers, early years practitioners, researchers, health professionals and community leaders working together to improve resilience to climate change and create opportunities for young people.

Following a successful collaboration with Myerscough College in 2024, we started a new project to co-design specialist learning resources that focus on coastal resilience. We are working with Shakespeare Primary School in Fleetwood and look forward to co-creating resources that incorporate the innovative work being delivered by Our Future Coast to test how natural coastal habitats, like salt marsh and sand dunes, can help protect the coast. The project is supported by widening participation funding from Lancaster University and Our Future Coast.

Big Bang Primary Science and Water Safety

In partnership with the North Yorkshire Fire and Rescue Service, we delivered 20 interactive sessions to over 120 primary pupils with our river flume and wave tank models as part of Primary Big Bang Science Day at Settle College. The event aimed to inspire a lifelong interest in science and STEM subjects and is part of the ongoing collaboration and knowledge exchange between primary and secondary science leads to help improve science provision in schools. As part of Drowning Prevention Week 2025 we also shared key messages about water safety in rivers and at the coast.

CityZen

Led by the Institution for Civil Engineer's Engagement and Inspiration team, the CityZen competition aims to engage school students with civil engineering and help them develop skills such as problem-solving, teamwork, critical thinking and communication. Student teams develop the infrastructure for a town within the context of climate change, flood risk and sustainability.

We supported the judging and awarded the 'JBA Trust Prize for People and Nature Positive Innovation' to an all-female team from Rochdale who designed a city concept that balanced urban growth with environmental protection, integrated green spaces, biodiversity, and sustainable infrastructure to create a nature-friendly urban environment.

SOTSEF25

As part of British Science Week, we worked with the University of Southampton's Public Engagement with Research unit (PERu) to support Science and Engineering Day 2025. This free festival was attended by over 5000 people, and through our wave tank activity we talked with people about climate change resilience on our coastlines and explored engineering for adaptation.

TeenTech

We attended the Cardiff and Lancashire TeenTech Festivals along with over 1000 students between ages 10-14 and their teachers. We delivered multiple hands-on sessions with our wave tank to help explore careers, skills and challenges in environmental engineering. TeenTech Festivals aim to help young people understand the range of opportunities across digital, science, technology and engineering.



Enabling knowledge exchange

Our website (www.jbatrust.org) enables people to access our publications and educational resources, as well as find information about JBA Trust and our research projects. It continues to help us deliver our charitable objectives of sharing knowledge and supporting engagement and learning.

JBA Trust's YouTube channel hosts all our video resources and we now have over 56,000 subscribers. We also use social media platforms like LinkedIn to publicise research outputs, new resources, publications, scholarships and awards.

Interactive physical models

Our physical models of catchments, rivers and coasts enable us to bring to life topics including flood risk, coastal and river engineering and nature-based solutions. The collection includes hydraulic river flumes, wave tanks, a rain model, an augmented reality sandbox, and a Projection Augmented Relief Model (PARM).

You can find out more about our models here: Physical models

Community of Practice

We maintain an online map to support a 'Community of Practice' for people who use physical models of water to support education and engagement. We created the maps to show where and how interactive models are being used across the globe to help educators share ideas, knowledge and inspiration to support outreach activities.

You can explore our map here: Community of Practice Map: Interactive models of water

Digital learning resources

Our digital learning resources have elements of engineering, maths and geography included in each topic in the context of flood risk, water management, weather and climate. They include videos, worksheet activities, case studies, maps and exercises.

All our learning resources are freely available on our website: Digital learning resources

Sharing experience

In 2024-25 we responded to over 66 direct enquiries about our interactive maps, data, publications and tools as well as research support, bursaries and scholarships, physical models and support for STEM activities.

Of these enquiries, there were 42 requests from around the world for support and assistance from people who, having seen our physical model and weather station resources, would like to build their own or set up their own educational project.

We have responded to schools, universities, environmental charities and emergency services, from the UK, Italy, Denmark, Netherlands, Canada, USA, Germany, Spain, France, Philippines, India, Belgium, France, Australia, India and UAE. By sharing factsheets and detailed specifications for our models, as well as sharing our learning resources and experiences of delivering STEM engagement, we aim to enable people to create their own educational resources to support their communities and raise awareness of flood risk management.

We continue to share our designs for the water safety flume and learning resources with fire and rescue teams and have so far supported services in Leicestershire, London, West Yorkshire, South Yorkshire, Cheshire, North Cumbria, Surrey, Tees, Lancashire, Greater Manchester, Derbyshire, Bury, East Flanders (Belgium) and Oregon and Richmond (USA).



Structure, governance & management

JBA Trust is a company limited by guarantee and is governed by its Memorandum and Articles of Association. It was incorporated on 9 November 2011.

Directors and trustees

The Trustees serving during the year were as follows:

Trustees	Rob Lamb
	Jeremy Benn
	Jim Hall
	Keith Beven
	Nick Russell
	Joanne Coles
	Peter Jimack
Secretary	Craig Robson

Governance

The trustees review the activities of JBA Trust every six months to ensure that they are focused on supporting the purpose of the charity. The review also considers the strategic direction of the charity and considers how planned activities will contribute to public benefit.

We have referred to the guidance contained in the Charity Commission's general guidance on public benefit when reviewing our aims and objectives and in planning our future activities.

Appointment of trustees

On incorporation of the JBA Trust, the Board of Trustees was appointed by invitation.

To preserve independence of the JBA Trust from JBA Group companies, which provide part of its core funding, the JBA Trust's Articles of Association stipulate that the number of trustees connected to or employed by JBA Group shall always be less than half of the total number of trustees appointed at any given time.

The trustees are not remunerated (other than payment to cover travel and accommodation costs where required for JBA Trust business).

Trustee induction and training

Periodically, the trustees meet and are briefed on their legal obligations under charity and company law, updates to the Charity Commission's guidance on public benefit, the content of the Memorandum and Articles of Association and the JBA Trust business plan.

Organisation

The Board of Trustees meets every six months and is responsible for the strategic direction and policy of the charity. A Managing Director is appointed by the trustees to manage the day-to day operations of the charity and is supported by a Programme Manager.

Risk management

The trustees have a risk management strategy which comprises:

- An annual review of the risks the charity may face
- Policies and procedures in place to mitigate those risks
- Plans in place to minimise the impact of the risks should they materialise.

The principal risk to JBA Trust is financial sustainability. This is mitigated by having a robust reserves policy and a clear financial plan which is reviewed and subsequently approved by the trustees at the start of the financial year.

JBA Trust adopts policies and procedures from our host, the JBA Group, which are externally validated where applicable. These include policies on: Health and Safety; Sustainability and Environmental Management; Safeguarding; Equality and Diversity; Artificial Intelligence.

Association of Charitable Foundations

As a member of the Association of Charitable Foundations (ACF), we support their vision of diverse, vibrant and effective foundations, working together for social good. We utilise the ACF's Stronger Foundations Initiative resources, in particular the '10 pillars of stronger practice for smaller foundations', to inform our strategy and help enhance our effectiveness.

Financial review

The principal funding source for JBA Trust is JBA Group dividends. JBA Trust also aims to leverage funding for research projects by supporting partners in applying for funding from external organisations, for example UK Research and Innovation (UKRI) grants awarded to university partners for PhD studentships. We also generate a small amount of additional income from services such as hire of our physical models for use by commercial organisations. Personal donations are processed through an online giving platform that enables Gift Aid to be claimed efficiently.

Reserves Policy

Reserves are required to minimise the financial risks associated with the unlikely event of unplanned or unforeseen expenditure. The JBA Trust maintains sufficient reserves to cover all contractually committed expenditure or liabilities and operating costs for one year.

Plan for future periods

JBA Trust anticipates continued long-term funding from JBA Group. To ensure that the charity maximises the value of its income in carrying out its activities, the strategic plan focuses on continuing to seek match funding for research projects from funding bodies, including Universities and Research Councils. In the future JBA Trust may also wish to generate an income by licensing datasets, results or models generated by research.

The trustees declare that they have approved the Trustees Report above.

R Lamb

R Lamb (Apr 20, 2026 10:53:04 GMT+1)

On behalf of the trustees

Rob Lamb, Managing Director of JBA Trust

Date: 20/04/2026

JBA TRUST LIMITED

(A company limited by guarantee)

INDEPENDENT EXAMINER'S REPORT FOR THE YEAR ENDED 31 OCTOBER 2025

INDEPENDENT EXAMINER'S REPORT TO THE TRUSTEES OF JBA TRUST LIMITED (the 'company')

I report to the charity Trustees on my examination of the accounts of the company for the year ended 31 October 2025.

This report is made solely to the company's Trustees, as a body, in accordance with Part 4 of the Charities (Accounts and Reports) Regulations 2008. My work has been undertaken so that I might state to the company's Trustees those matters I am required to state to them in an Independent examiner's report and for no other purpose. To the fullest extent permitted by law, I do not accept or assume responsibility to anyone other than the company and the company's Trustees as a body, for my work or for this report.

RESPONSIBILITIES AND BASIS OF REPORT

As the Trustees of the company (and its directors for the purposes of company law) you are responsible for the preparation of the accounts in accordance with the requirements of the Companies Act 2006 ('the 2006 Act').

Having satisfied myself that the accounts of the company are not required to be audited under Part 16 of the 2006 Act and are eligible for independent examination, I report in respect of my examination of the company's accounts carried out under section 145 of the Charities Act 2011 ('the 2011 Act'). In carrying out my examination I have followed the Directions given by the Charity Commission under section 145(5)(b) of the 2011 Act.

INDEPENDENT EXAMINER'S STATEMENT

I have completed my examination. I can confirm that no matters have come to my attention in connection with the examination giving me cause to believe:

1. accounting records were not kept in respect of the company as required by section 386 of the 2006 Act; or
2. the accounts do not accord with those records; or
3. the accounts do not comply with the accounting requirements of section 396 of the 2006 Act other than any requirement that the accounts give a 'true and fair' view which is not a matter considered as part of an independent examination; or
4. the accounts have not been prepared in accordance with the methods and principles of the Statement of Recommended Practice for accounting and reporting by charities [applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102).

I have no concerns and have come across no other matters in connection with the examination to which attention should be drawn in this report in order to enable a proper understanding of the accounts to be reached.

Signed: Armstrong Watson Audit Limited Dated: 20/04/2026

Armstrong Watson Audit Limited (Apr 20, 2026 11:04:35 GMT+1)

Rohan Day FCA

Armstrong Watson Audit Limited
Number 3
Acorn Business Park
Airedale Business Centre
Skipton
North Yorkshire
BD23 2UE

JBA TRUST LIMITED

(A company limited by guarantee)

STATEMENT OF FINANCIAL ACTIVITIES INCORPORATING INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 OCTOBER 2025

	Note	Unrestricted funds 2025 £	Total funds 2025 £	*Total funds* 2024 £
INCOME FROM:				
Donations and legacies	2	**217,189**	**217,189**	193,414
Investments	3	**5,482**	**5,482**	5,678
TOTAL INCOME		**222,671**	**222,671**	199,092
EXPENDITURE ON:				
Charitable activities	4,5,6	**248,756**	**248,756**	231,804
TOTAL EXPENDITURE		**248,756**	**248,756**	231,804
NET EXPENDITURE BEFORE OTHER RECOGNISED GAINS AND LOSSES		**(26,085)**	**(26,085)**	(32,712)
NET MOVEMENT IN FUNDS		**(26,085)**	**(26,085)**	(32,712)
RECONCILIATION OF FUNDS:				
Total funds brought forward		**144,920**	**144,920**	177,632
TOTAL FUNDS CARRIED FORWARD		**118,835**	**118,835**	144,920

The notes on pages 6 to 13 form part of these financial statements.

JBA TRUST LIMITED

(A company limited by guarantee)

REGISTERED NUMBER: 07840801

BALANCE SHEET
AS AT 31 OCTOBER 2025

	Note	£	2025 £	£	2024 £
FIXED ASSETS					
Tangible assets	9		**5,538**		6,208
CURRENT ASSETS					
Debtors	10	**590**		10,622	
Cash at bank and in hand		**115,443**		130,904	
		116,033		141,526	
CREDITORS: amounts falling due within one year	11	**(2,736)**		(2,814)	
NET CURRENT ASSETS			**113,297**		138,712
NET ASSETS			**118,835**		144,920
CHARITY FUNDS					
Unrestricted funds	12		**118,835**		144,920
TOTAL FUNDS			**118,835**		144,920

The company's financial statements have been prepared in accordance with the provisions applicable to companies subject to the small companies regime.

The Trustees consider that the company is entitled to exemption from the requirement to have an audit under the provisions of section 477 of the Companies Act 2006 ("the Act") and members have not required the company to obtain an audit for the year in question in accordance with section 476 of the Act.

The Trustees acknowledge their responsibilities for complying with the requirements of the Companies Act 2006 with respect to accounting records and the preparation of financial statements.

The financial statements have been prepared in accordance with the provisions applicable to companies subject to the small companies regime and in accordance with the provisions of FRS 102 Section 1A - small entities.

The financial statements were approved and authorised for issue by the Trustees on 20/04/2026 and signed on their behalf, by:

R Lamb

R Lamb (Apr 20, 2026 10:53:04 GMT+1)

R Lamb
Director

The notes on pages 6 to 13 form part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2025

1. ACCOUNTING POLICIES

1.1 Basis of preparation of financial statements

The financial statements have been prepared in accordance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) - (Charities SORP (FRS 102)), the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Companies Act 2006.

JBA Trust Limited meets the definition of a public benefit entity under FRS 102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy.

The principal activity of the company is to enhance understanding and management of risks in the water environment by enabling research, education and training.

The company is a company limited by guarantee incorporated and domiciled in the United Kingdom.

These financial statements have been presented in Pound Sterling as this is the currency of the primary economic environment in which the company operates.

1.2 Company status

The company is a company limited by guarantee. The members of the company are the Trustees named on page 1. In the event of the company being wound up, the liability in respect of the guarantee is limited to £10 per member of the company.

1.3 Going concern

The financial statements have been prepared on the going concern basis. This is based on the continued financial support of its sponsors and creditors, which is confirmed at regular intervals, allied to the maintenance of a robust reserves policy.

1.4 Income

All income is recognised once the company has entitlement to the income, it is probable that the income will be received and the amount of income receivable can be measured reliably.

Donated services or facilities are recognised when the company has control over the item, any conditions associated with the donated item have been met, the receipt of economic benefit from the use of the company of the item is probable and that economic benefit can be measured reliably. In accordance with the Charities SORP (FRS 102), the general volunteer time of the Friends is not recognised and refer to the Trustees' report for more information about their contribution.

On receipt, donated professional services and donated facilities are recognised on the basis of the value of the gift to the company which is the amount the company would have been willing to pay to obtain services or facilities of equivalent economic benefit on the open market; a corresponding amount is then recognised in expenditure in the period of receipt.

Income tax recoverable in relation to donations received under Gift Aid or deeds of covenant is recognised at the time of the donation.

Income tax recoverable in relation to investment income is recognised at the time the investment income is receivable.

1. ACCOUNTING POLICIES (continued)

1.5 Expenditure

Expenditure is recognised once there is a legal or constructive obligation to transfer economic benefit to a third party, it is probable that a transfer of economic benefits will be required in settlement and the amount of the obligation can be measured reliably. Expenditure is classified by activity. The costs of each activity are made up of the total of direct costs and shared costs, including support costs involved in undertaking each activity. Direct costs attributable to a single activity are allocated directly to that activity. Shared costs which contribute to more than one activity and support costs which are not attributable to a single activity are apportioned between those activities on a basis consistent with the use of resources. Central staff costs are allocated on the basis of time spent, and depreciation charges allocated on the portion of the asset's use.

Support costs are those costs incurred directly in support of expenditure on the objects of the company and include project management carried out at Headquarters. Governance costs are those incurred in connection with administration of the company and compliance with constitutional and statutory requirements.

Charitable activities and Governance costs are costs incurred on the company's educational operations, including support costs and costs relating to the governance of the company apportioned to charitable activities.

Grants payable are charged in the year when the offer is made except in those cases where the offer is conditional, such grants being recognised as expenditure when the conditions attaching are fulfilled. Grants offered subject to conditions which have not been met at the year end are noted as a commitment, but not accrued as expenditure.

1.6 Tangible fixed assets and depreciation

A review for impairment of a fixed asset is carried out if events or changes in circumstances indicate that the carrying value of any fixed asset may not be recoverable. Shortfalls between the carrying value of fixed assets and their recoverable amounts are recognised as impairments. Impairment losses are recognised in the Statement of financial activities incorporating income and expenditure account.

Tangible fixed assets are carried at cost, net of depreciation and any provision for impairment. Depreciation is provided at rates calculated to write off the cost of fixed assets, less their estimated residual value, over their expected useful lives on the following bases:

Plant and machinery	-	25% straight line
Motor vehicles	-	25% straight line
Equipment	-	25% straight line

1.7 Interest receivable

Interest on funds held on deposit is included when receivable and the amount can be measured reliably by the company; this is normally upon notification of the interest paid or payable by the Bank.

1.8 Debtors

Trade and other debtors are recognised at the settlement amount after any trade discount offered. Prepayments are valued at the amount prepaid net of any trade discounts due.

1. ACCOUNTING POLICIES (continued)

1.9 Cash at Bank and in hand

Cash at bank and in hand includes cash and short term highly liquid investments with a short maturity of three months or less from the date of acquisition or opening of the deposit or similar account.

1.10 Liabilities and provisions

Liabilities are recognised when there is an obligation at the Balance sheet date as a result of a past event, it is probable that a transfer of economic benefit will be required in settlement, and the amount of the settlement can be estimated reliably. Liabilities are recognised at the amount that the company anticipates it will pay to settle the debt or the amount it has received as advanced payments for the goods or services it must provide. Provisions are measured at the best estimate of the amounts required to settle the obligation. Where the effect of the time value of money is material, the provision is based on the present value of those amounts, discounted at the pre-tax discount rate that reflects the risks specific to the liability. The unwinding of the discount is recognised within interest payable and similar charges.

1.11 Fund accounting

General funds are unrestricted funds which are available for use at the discretion of the Trustees in furtherance of the general objectives of the company and which have not been designated for other purposes.

2. INCOME FROM DONATIONS AND LEGACIES

	Unrestricted funds 2025	**Total funds 2025**	*Total funds* 2024
	£	**£**	£
Donated services	**175,783**	**175,783**	157,056
Donations	**34,790**	**34,790**	27,464
Sales	**590**	**590**	590
Sale of assets	**-**	**-**	4,799
Other income	**6,026**	**6,026**	3,505
Total donations and legacies	**217,189**	**217,189**	193,414
Total 2024	193,414	193,414	

Donated services are provided by the trading subsidiaries of JBA Group Limited and are valued at standard chargeable rates.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2025

3. INVESTMENT INCOME

	Unrestricted funds 2025 £	Total funds 2025 £	*Total funds* 2024 £
Interest received	**5,482**	**5,482**	5,678
Total 2024	5,678	5,678	

4. ANALYSIS OF GRANTS

	Grants to Institutions 2025 £	Grants to Support Activities 2025 £	Total 2025 £	*Total* 2024 £
Grants, Activities undertaken	**20,570**	**153,167**	**173,737**	173,923
Total 2024	41,730	132,193	173,923	

	2025 £	2024 £
Grants to institutions	**20,570**	41,730
Research projects	**78,381**	58,601
Project pipeline development	**28,632**	21,591
Education and training	**46,114**	51,416
Seminars	**40**	585
Total	**173,737**	173,923

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2025

5. SUPPORT COSTS

	Activities undertaken £	Total 2025 £	Total 2024 £
Programme management	**42,871**	**42,871**	33,743
Sundry expenses	**1,282**	**1,282**	722
Communication and website	**17,260**	**17,260**	13,951
Computer consumables and software licences	**119**	**119**	350
Motor and travel expenses	**2,067**	**2,067**	1,238
Office costs	**3,621**	**3,621**	732
Insurance	**595**	**595**	558
Legal and professional	**133**	**133**	130
Depreciation	**3,430**	**3,430**	2,855
	71,378	**71,378**	54,279
Total 2024	54,279	54,279	

During the year ended 31 October 2025, the company incurred the following Governance costs:

£NIL (2024 - £*NIL*) included within the table above in respect of Activities undertaken directly.
£NIL (2024 - £*NIL*) included within the table above in respect of Support costs.

6. GOVERNANCE COSTS

	Unrestricted funds 2025 £	Total funds 2025 £	*Total funds* 2024 £
Accountancy fees	**3,360**	**3,360**	3,240
Bank charges	**321**	**321**	362
	3,681	**3,681**	3,602

7. NET INCOME/(EXPENDITURE)

This is stated after charging:

	2025 £	2024 £
Depreciation of tangible fixed assets:		
- owned by the charity	**3,430**	2,855

During the year, no Trustees received any remuneration (2024 - £NIL).
During the year, no Trustees received any benefits in kind (2024 - £NIL).
During the year, no Trustees received any reimbursement of expenses (2024 - £NIL).

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2025

8. EMPLOYEES

The company has no employees other than the Trustees, in both the current and previous year.

9. TANGIBLE FIXED ASSETS

	Plant and machinery £	Equipment £	Total £
Cost			
At 1 November 2024	**48,607**	**1,607**	**50,214**
Additions	**2,760**	**-**	**2,760**
At 31 October 2025	**51,367**	**1,607**	**52,974**
Depreciation			
At 1 November 2024	**42,399**	**1,607**	**44,006**
Charge for the year	**3,430**	**-**	**3,430**
At 31 October 2025	**45,829**	**1,607**	**47,436**
Net book value			
At 31 October 2025	**5,538**	**-**	**5,538**
At 31 October 2024	6,208	-	6,208

10. DEBTORS

	2025 £	2024 £
Trade debtors	**590**	1,180
Other debtors	**-**	9,442
	590	10,622

11. CREDITORS: Amounts falling due within one year

	2025 £	2024 £
Trade creditors	**587**	663
Accruals and deferred income	**2,149**	2,151
	2,736	2,814

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2025

12. STATEMENT OF FUNDS

STATEMENT OF FUNDS - CURRENT YEAR

	Balance at 1 November 2024 £	Income £	Expenditure £	Balance at 31 October 2025 £
Unrestricted funds				
General Funds	**144,920**	**222,671**	**(248,756)**	**118,835**

STATEMENT OF FUNDS - PRIOR YEAR

	Balance at 1 November 2023 £	*Income* £	*Expenditure* £	*Balance at 31 October 2024* £
General Funds	177,632	199,092	(231,804)	144,920
Total of funds	177,632	199,092	(231,804)	144,920

13. ANALYSIS OF NET ASSETS BETWEEN FUNDS

ANALYSIS OF NET ASSETS BETWEEN FUNDS - CURRENT YEAR

	Unrestricted funds 2025 £	Total funds 2025 £
Tangible fixed assets	**5,539**	**5,539**
Current assets	**116,033**	**116,033**
Creditors due within one year	**(2,737)**	**(2,737)**
	118,835	**118,835**

ANALYSIS OF NET ASSETS BETWEEN FUNDS - PRIOR YEAR

	Unrestricted funds 2024 £	*Total funds* 2024 £
Tangible fixed assets	6,209	6,209
Current assets	141,526	141,526
Creditors due within one year	(2,815)	(2,815)
	144,920	144,920

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2025

14. RELATED PARTY TRANSACTIONS

During the year, donations were received from JBA Risk Management Limited of £30,790 (2024 - £27,464).

Included within debtors, amounts falling due within one year is an amount of £Nil (2024 - £9,442) due from Jeremy Benn Associates Limited. During the year, donated services were received from Jeremy Benn Associates Limited of £174,479 (2024 - £155,628).

Both JBA Risk Management Limited and Jeremy Benn Associates Limited are under common control by virtue of the shareholdings and trusteeship of J R Benn.

JBA Trust Limited - Accounts for Signing

Final Audit Report 2026-04-20

Created:	2026-04-20
By:	Jamie Barker (Jamie.Barker@armstrongwatson.co.uk)
Status:	Signed
Transaction ID:	CBJCHBCAABAAHDCTQa_6bdswanYe39SRG_gCIPDZRC7s

"JBA Trust Limited - Accounts for Signing" History

Document created by Jamie Barker (Jamie.Barker@armstrongwatson.co.uk)
2026-04-20 - 09:22:34 GMT- IP address: 188.39.58.50

Document emailed to rob.lamb@jbatrust.org for signature
2026-04-20 - 09:46:19 GMT

Email viewed by rob.lamb@jbatrust.org
2026-04-20 - 09:52:02 GMT- IP address: 80.194.116.67

Signer rob.lamb@jbatrust.org entered name at signing as R Lamb
2026-04-20 - 09:53:02 GMT- IP address: 80.194.116.67

Document e-signed by R Lamb (rob.lamb@jbatrust.org)
Signature Date: 2026-04-20 - 09:53:04 GMT - Time Source: server- IP address: 80.194.116.67

Document emailed to Rohan Day (rohan.day@armstrongwatson.co.uk) for signature
2026-04-20 - 09:53:07 GMT

Email viewed by Rohan Day (rohan.day@armstrongwatson.co.uk)
2026-04-20 - 09:53:10 GMT- IP address: 161.123.224.187

Signer Rohan Day (rohan.day@armstrongwatson.co.uk) entered name at signing as Armstrong Watson Audit Limited
2026-04-20 - 10:04:33 GMT- IP address: 85.118.13.141

Document e-signed by Armstrong Watson Audit Limited (rohan.day@armstrongwatson.co.uk)
Signature Date: 2026-04-20 - 10:04:35 GMT - Time Source: server- IP address: 85.118.13.141

Agreement completed.
2026-04-20 - 10:04:35 GMT

JBA TRUST LIMITED

England & Wales - Charity number 1150278

Accounts

Company Registration Number 07840801

Charity number: 1150278

JBA TRUST LIMITED

UNAUDITED
FINANCIAL STATEMENTS

31 OCTOBER 2024

(A company limited by guarantee)

ArmstrongWatson®

Accountants, Business & Financial Advisers

JBA TRUST LIMITED

(A company limited by guarantee)

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JBA TRUST LIMITED

(A company limited by guarantee)

REFERENCE AND ADMINISTRATIVE DETAILS OF THE COMPANY, ITS TRUSTEES AND ADVISERS FOR THE YEAR ENDED 31 OCTOBER 2024

Trustees

Rob Lamb, JBA (Managing Director)
Jeremy Benn, JBA
Jim Hall, University Professor
Keith Beven, University Professor Emeritus
Nick Russell, Bank Corporate Director (retired)
Joanne Coles, Senior Advisor (Appointed 3 September 2023)
Peter Jimack, University Professor (Appointed 3 September 2023)

Company registered number

07840801

Charity registered number

1150278

Registered office

1 Broughton Park, Old Lane North, Broughton, Skipton, North Yorkshire, BD23 3FD

Company secretary

C Robson

Independent examiners

Armstrong Watson Audit Limited, Number 3, Acorn Business Park, Airedale Business Centre, Skipton, North Yorkshire, BD23 2UE

JBA TRUST LIMITED

(A company limited by guarantee)

TRUSTEES' REPORT
FOR THE YEAR ENDED 31 OCTOBER 2024

The Trustees present their annual report together with the financial statements of the company for the 1 November 2023 to 31 October 2024. The Trustees confirm that the Annual Report and financial statements of the company comply with the current statutory requirements, the requirements of the company's governing document and the provisions of the Statement of Recommended Practice (SORP), applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) as amended by Update Bulletin 1 (effective 1 January 2015).

GOING CONCERN

The financial statements have been prepared on the going concern basis. This is based on the continued financial support of its sponsors and creditors, which is confirmed at regular intervals, allied to the maintenance of a robust reserves policy.

TRUSTEES' RESPONSIBILITIES STATEMENT

The Trustees (who are also directors of JBA Trust Limited for the purposes of company law) are responsible for preparing the Trustees' report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

Company law requires the Trustees to prepare financial statements for each financial year. Under company law the Trustees must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the charitable company and of the incoming resources and application of resources, including the income and expenditure, of the charitable company for that period. In preparing these financial statements, the Trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP;
- make judgments and accounting estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue in operation.

The Trustees are responsible for keeping adequate accounting records that are sufficient to show and explain the charitable company's transactions and disclose with reasonable accuracy at any time the financial position of the charitable company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

This report was approved by the Trustees, on 31/03/2025 and signed on their behalf by:

R Lamb
R Lamb (Mar 31, 2025 14:35 GMT+1)

Rob Lamb, Managing Director

Director's Report

Over the past year, we have continued to expand our knowledge-sharing and engagement work with a Community of Practice around physical models and engagement resources. We have extended our reach through new and established partnerships, supporting a growing network of educators, researchers, and practitioners who use our resources to enhance understanding of climate risks, the water cycle, and resilience. Demand for our demonstration models continues to outstrip capacity, reinforcing the need for collaboration and shared learning.

The research and education sectors face funding challenges. Our university partners work hard to attract talent into doctoral research programmes. Pressures are also evident in taught postgraduate training and professional development, underlining the importance of our ongoing support. We remain committed to enabling high-quality research and specialist training by providing technical expertise, funding, and opportunities for early-career researchers and practitioners to develop their skills in applied science and risk management.

Generative Artificial Intelligence (AI) has taken off in the last year and is becoming a pervasive influence across society. We have already supported work on data-driven, machine learning models, particularly with a view to the interpretation and transparency of those models. Building on insights from our 10th anniversary review in 2022, we have engaged in research into the "explainability" of AI decision-making. We have used large language models (LLMs) for coding, data analysis, and natural language processing to improve accessibility of complex datasets about historical flood events.

With AI technology and usage evolving rapidly, we have also contributed to research into the fundamental behaviour of LLMs. This work will continue as we explore how emerging AI tools can be responsibly and effectively integrated into scientific and technical applications.

We are grateful for the continued support of our partners, including funding from the JBA Group of companies, enabling us to focus on sharing knowledge to help build resilience in the face of climate-related risks.

R Lamb

R Lamb (Mar 31, 2025 14:35 GMT+1)

Rob Lamb, Managing Director
Date: 31/03/2025



Our purpose and activities

JBA Trust is a charity established and funded by the JBA Group of companies. We aim to help improve people's resilience to environmental risks by sharing knowledge. We do this by enabling research, education and engagement.

We work with academic researchers, NGOs, charities and the JBA Group of companies in four key areas:

- Facilitating collaboration between academia and industry to deliver high quality scientific research.
- Publishing and disseminating knowledge, enabling shared understanding and good practice.
- Supporting post-graduate training by providing technical expertise and financial bursaries for MSc and PhD studentships.
- Engaging with schools, charities and voluntary groups to share inspiration and learning resources.

This annual report reviews the activities of the JBA Trust over the past year and how our work has delivered public benefit.



Science and research

We facilitate collaboration between academia and industry to deliver high quality scientific research. By publishing and communicating research outputs, we enable knowledge exchange and share best practice.

Collaborative research

In 2023-24 we worked with universities, research institutions, public sector and charitable organisations. The highlights and outputs of our collaborative research projects are summarised below.

Support for Centres for Doctoral Training (CDTs)

The UK government has committed significant new investment for the provision of high quality, cohort-based doctoral education through Centres for Doctoral Training (CDTs).

We worked closely with university partners to support the co-development of centres that focus on the themes of flood and climate resilience, uncertainty and risk, and the underpinning data science that supports evidence-led decision making. As well as helping to identify knowledge gaps and needs within these themes, we aim to support the successful CDTs through PhD sponsorship and placement provision.

Of the seven that we formally supported, the following centres were funded and we look forward to working with these partners over the coming years:

- Fluid Dynamics (University of Leeds)
- STOR-i: Statistics and Operational Research (Lancaster University)
- FLOOD-CDT (University consortium of Southampton, Loughborough and Bristol)
- UNRISK: Understanding Uncertainty to Reduce Climate Risks (University consortium of Leeds, UCL and Exeter)

Mathematics Knowledge Exchange Catalyst for Humanity

We were delighted to start working with Dr Phil Trinh at the International Centre for Mathematical Sciences (ICMS) University of Bath through a maths KE Catalyst project. Our project 'Upstream insights to downstream benefits', will explore the impact of mathematical analysis on flood risk management and industry modelling practice.

The collaboration will explore how mathematical analysts can work with hydrologists and risk modellers to improve our understanding of the differences between models so they can be used more effectively.

Read more here: KE Catalysts for Humanity

UK Flood Hydrology Roadmap

The flood hydrology roadmap is a 25-year vision and plan to advance all aspects of flood hydrology in the United Kingdom. It was developed with inputs from more than 270 individuals from 50 organisations working in hydrology, flood management and related topics. We have supported the roadmap project since it started in 2018 through membership of its steering group and by contributing to publications and presentations.

We have continued supporting the roadmap through contributions to the Science and Technical Advisory Group, and by providing specific advice for projects developing within the Environment Agency's Flood Hydrology Improvements Programme.

Read more here: UK Flood Hydrology Roadmap

British Chronology of Flash Floods: Interactive map and dataset

The chronology lists flash flood events in Britain derived by retired hydrologist David Archer from historical reports dating back over more than 200 years to support improved assessments of flash flood risk.

We have created an interactive online map that displays a point for each significant place name in the chronology to make it easier to search for flash floods by location, for example catchment or town. The new maps were shared with the hydrological community at the British Hydrological Society's Symposium in September 2024.

Read more here: British Chronology of Flash Floods



Doctoral research projects

Our collaboration with universities across the UK enables us to support graduate researchers (research students) working on doctoral projects to develop advanced skills and deliver high quality research that helps enhance the understanding of a wide range of risks in the environment. We support doctoral researchers through a variety of programmes including doctoral training centres funded by UK Research and Innovation (UKRI). Information about all our PhD projects can be found here: Early career researchers : JBA Trust

This year, we supported 11 PhD students and were delighted to see two of our graduate researchers successfully complete their PhDs:



Andrew Johnson, studying at the University of Leeds, developed a comprehensive model and methodology to enable decision-makers to assess the vulnerability of freshwater communities to extreme hydraulic events.

His research will inform guidance on the best approaches to enhance resistance and resilience.



Helen Hooker, studying at Reading University, improved the capability of real-time 2D flood forecasts using data assimilation from earth observation data.

She developed a new method for validating flood maps using a scale-selective approach to enable a quantitative, location specific measure of flood map accuracy.

PhD project outputs

We are pleased to be able to share this year's peer-reviewed publications from the projects

Freya Muir, studying at Glasgow University, published a paper in the Earth Surface Processes and Landforms journal on '*VedgeSat: An automated, open-source toolkit for coastal change monitoring using satellite-derived vegetation edges'.* The aim of Freya's research is to develop an operational framework for predicting coastal change, using machine learning techniques that are trained with satellite observations.

Read the paper here: https://doi.org/10.1002/esp.5835.

Helen Hooker, studying at Reading University, has a journal paper in open review with Hydrology and Earth System Sciences (HESS) on '*Assimilation of satellite flood likelihood data improves inundation mapping from a simulation library system'*.

Read the paper here: https://doi.org/10.5194/hess-2024-178



Research publications

During the year, we supported and co-authored four studies published as papers in peer-reviewed scientific journals.

Title and link	Journal	Authors
Assimilation of satellite flood likelihood data improves inundation mapping from a simulation library system	Hydrology and Earth System Sciences Discussions	Hooker, H. and Dance, S. and Mason, D. and Bevington, J. and Shelton, K.
Gauged and historical abrupt wave front floods ('walls of water') in Pennine rivers, northern England	Journal of Flood Risk Management	Archer, D, Watkiss, S, Warren, S, Lamb, R & Fowler, HJ
How to cope with uncertainty monsters in flood risk management?	Cambridge Prisms: Water	Knotters, M, Bokhove, O, Lamb, R & Poortvliet, PM
VedgeSat: An automated, open-source toolkit for coastal change monitoring using satellite-derived vegetation edges	Earth Surface Processes and Landforms	Muir, F.M.E., Hurst, M.D., Richardson-Foulger, L., Rennie, A.F. & Naylor, L.A.



Support for postgraduate students

There are many academic subjects that generate the knowledge and understanding needed to manage risks in our environment. Whilst undergraduate courses such as Geography and Environmental or Physical Sciences are important, the relevant specialist training often comes into greater focus at postgraduate (PGCert, Masters or doctoral) level. We therefore emphasise support for students and projects at this level.

The British Hydrological Society and JBA Trust Studentship Awards

In 2023-24 we continued our partnership established in 2011 with the British Hydrological Society (BHS) to support students working towards MSc (or equivalent level) qualifications in hydrology, water resources, catchment management and other related subjects.

We awarded six bursaries of £2,250 and have now made awards to 113 students at 25 different UK universities since 2011.

Recipients of the bursaries last year told us about what difference the awards had made:

> *"The Studentship Award enabled me to go to my first choice university which was more expensive than other programmes"*

> *"Having the opportunity to really focus my undergrad degree from general geography to river specific topics was really rewarding"*

We continue to collect information on equality, diversity and inclusion (EDI) as part of the application process. The aim is to build an understanding of the diversity of recipients, alongside the partners' ambitions to make the awards inclusive.

Flood and Coastal Risk Management Scholarships

The challenges of more frequent extreme weather and new flood risk responsibilities mean that there is a growing need for skilled water and environmental risk management professionals.

This year we continued our support by funding scholarships for Lancaster University's Flood and Coastal Risk Management Postgraduate Certificate course. We offer financial support towards the course fees where the training will help individual recipients bring benefits to communities through third sector or public sector organisations.

The number of strong applications was significantly higher than previous years and all were from local authorities with flood risk and climate adaptation responsibilities. We made three awards, with a total value of £18,000. Congratulations to our scholarship recipients!



Kathryn Lawrence

FCERM Graduate Engineer, BCP Council

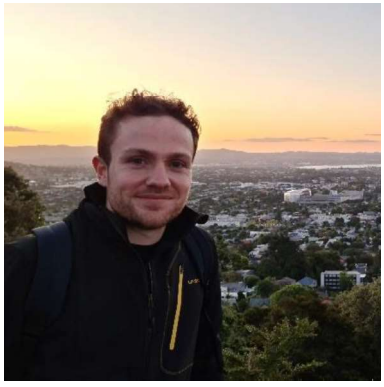
" This course will be invaluable for increasing my technical knowledge, helping me to progress my career and in turn improve the flood resilience of our community by applying what I have learned to managing local flood risks. "



Owen Grove

Flood & Water Management Officer, Milton Keynes City Council

" Having grown up in Milton Keynes, I look forward applying the technical and practical knowledge provided by the course to the work that I do, with the ambition to implement best practices across the varied work we do as a team to serve the people of Milton Keynes as best as we can. "



Robert Prescott

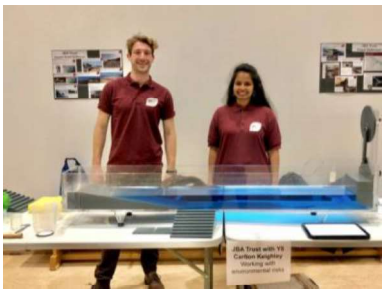
Engineer in Development Flood Risk, Wakefield Council

" Deepening my understanding of flood prevention strategies will enhance my ability to manage and mitigate flood risks in my role at the lead local flood authority. By learning advanced techniques and gaining insight into sustainable approaches, I'll be able to develop more effective flood resilience plans and better protect our communities."











Learning and engagement activities

We support a wide range of activities aimed at encouraging students at schools and universities to develop or enhance their interests in water and environmental management, which could also ultimately lead them to pursue careers in the field. Our learning and engagement activities also extend to the wider community, and to flood risk management professionals.

STEM Equity Compass

We are implementing the STEM Equity Compass in our outreach and engagement activity. Diversifying participation in science, technology, engineering and maths (STEM) is a key challenge within the water and environmental management sector.

Developed by UCL, the Equity Compass is a framework that helps to support socially just practice and improve the inclusivity and equity of informal STEM learning.

The tool is underpinned by social science research and is designed to enable practitioners to make decisions, plan, monitor and evaluate progress.

We are using it to reflect on our current practice and resources, and to identify where and how we can improve so we can make positive changes to our STEM activities.

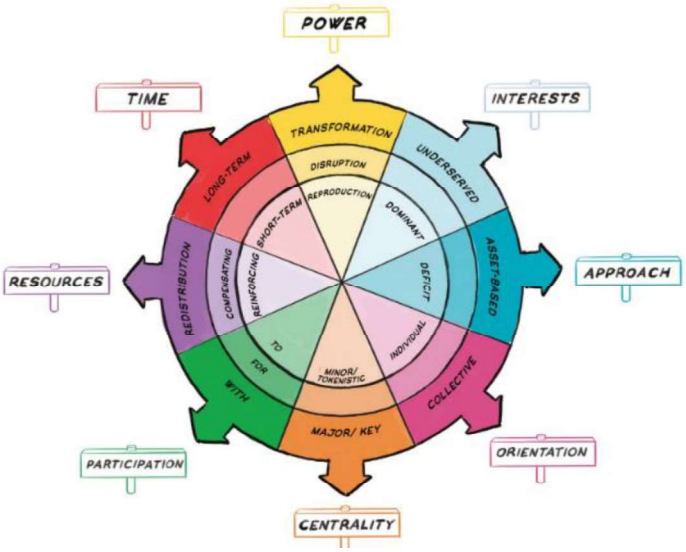


Image: YESTEM Project UK Team (2020) The Equity Compass: A Tool for supporting socially just practice. www.yestem.org

STEM partnerships

We worked with many different organisations this year to co-develop learning resources and deliver activities to support STEM engagement in schools and other educational settings.

Morecambe Bay Curriculum

The Morecambe Bay Curriculum (MBC) project is a community-curated, place-based approach to learning about sustainability. MBC helped us work with Myerscough College, a specialist provider of land-based and sports education. We co-developed resources to embed place-based learning on climate change and flood risk into specialist curriculum areas. Outputs of the project include teaching resources, lesson plans and guidance.

Envision OUT

In partnership with Lancaster University, we worked with 90 Year 9 students who took part in our new wave tank challenge game over 2 days, creating new designs for coastal flood resilience and exploring the impact of climate change on coastal communities. It formed part of the Envision OUT initiative, through Lancaster University's 'Nurturing Talent' days, which aim to widen participation in environmental sciences amongst underrepresented young people, engage students with the natural environment and facilitate links with higher education

TeenTech

We attended the Cardiff and Preston TeenTech Festivals along with over 1000 students between ages 10-14 and their teachers. TeenTech Festivals enable students and teachers to come together and help young people understand the range of opportunities across digital, science, technology and engineering. We delivered multiple hands-on sessions with our wave tank.

CityZen

Led by the ICE's Engagement and Inspiration team, the CityZen competition aims to engage school students with civil engineering and help them develop important skills for work and study, such as problem-solving, teamwork, critical thinking and communication. Student teams develop the infrastructure for a town within the context of climate change, flood risk and sustainability. Over 190 schools took part and we supported the judging and awards process.

UK Junior Water Prize

We supported the UK Junior Water Prize 2024, a STEM competition hosted by CIWEM where students develop a research project into an innovative yet practical solution to the water crisis. The UK winners were announced at the Flood & Coast conference in June 2024 and went on to win the international competition in Stockholm.

Industrial Cadets

We worked with 29 students from schools across Leeds, Bradford, Halifax, Huddersfield, York and Sheffield as part of the Industrial Cadets scheme organised by the Engineering Development Trust (EDT) and Yorkshire Water. The students took part in our hydraulic river flume session at Salts Mill to learn more about water safety and how engineered structures affect the flow and ecology of rivers.

Climate Ambassadors

We supported the Climate Ambassadors 'Climate and Nature Action in Education' event at the Great North Museum in Newcastle. The event was part of the Climate Ambassadors initiative that offers every education setting in England free access to volunteer support to develop and deliver impactful climate action plans. We showed educators how models like our wave tank can be used to explore the impacts of climate change and how we can adapt and make our communities more resilient to flood risk, sea-level rise and extreme weather events.

Wider engagement in resilience, flood risk and water safety

This year, we chose to develop partnerships with organisations that have strong relationships with local communities or have a well-established outreach and engagement track record. This approach helped us utilise our resources more effectively and enabled us to reach more diverse communities.

The Water Safety Centre of Excellence officially opened at the **London Fire Brigade's** (LFB) Twickenham Station in July with our 'big river' flume forming the core learning resource.



The new centre aims to educate and encourage safe engagement with the River Thames and is part of the LFB's push on water safety. LFB is working closely with schools, encouraging them to prioritise water safety education, and is also expanding delivery of water safety sessions to further year groups in partnership with Richmond Council, the RNLI and the Met Police.

We also supported the **London Science Museum** exhibition this summer in partnership with volunteers from the Environment Agency. Our wave tank supported engagement on the theme of 'skills' in relation to flood risk management, climate change resilience and environmental protection.



Enabling knowledge exchange

Our website (www.jbatrust.org) enables people to easily access all our publications and educational resources, as well as find information about JBA Trust and our research projects. It continues to help us deliver our charitable objectives of sharing best practice and supporting engagement and education.

JBA Trust's YouTube channel hosts all our video resources and we now have over 56,000 subscribers. Across all social media platforms, our videos have received over 35 million views.

We also use LinkedIn and Twitter to publicise research outputs, new resources, publications or scholarships and awards.

Learning resources

Our digital learning resources have elements of engineering, maths and geography included in each topic in the context of flood risk, water management, weather and climate. They include videos, worksheet activities, case studies and exercises.

This year we developed a new package of resources that supports an interactive roleplay game on coastal resilience that explores ways to work with communities to reduce coastal flooding and erosion risks, as well as developing skills such as team working, communication and problem solving. The new Coastal Resilience Challenge game is freely available on our website alongside all our learning resources: Digital learning resources : JBA Trust.

Physical models

Our physical models of catchments, rivers and coasts enable us to bring to life topics including flood risk, coastal and river engineering and nature-based solutions. The collection includes four different sized hydraulic river flumes, four wave tanks, an augmented reality sandbox and a Projection Augmented Relief Model (PARM). Read more here: Physical models : JBA Trust

Sharing experience

In 2023-24 we responded to over 100 direct enquiries about our interactive maps, data, publications and tools as well as research support, bursaries and scholarships, physical models and support for STEM activities.

Of these enquiries, there were 30 requests from around the world for support and assistance from people who, having seen our physical model and weather station resources, would like to build their own or set up their own educational project.

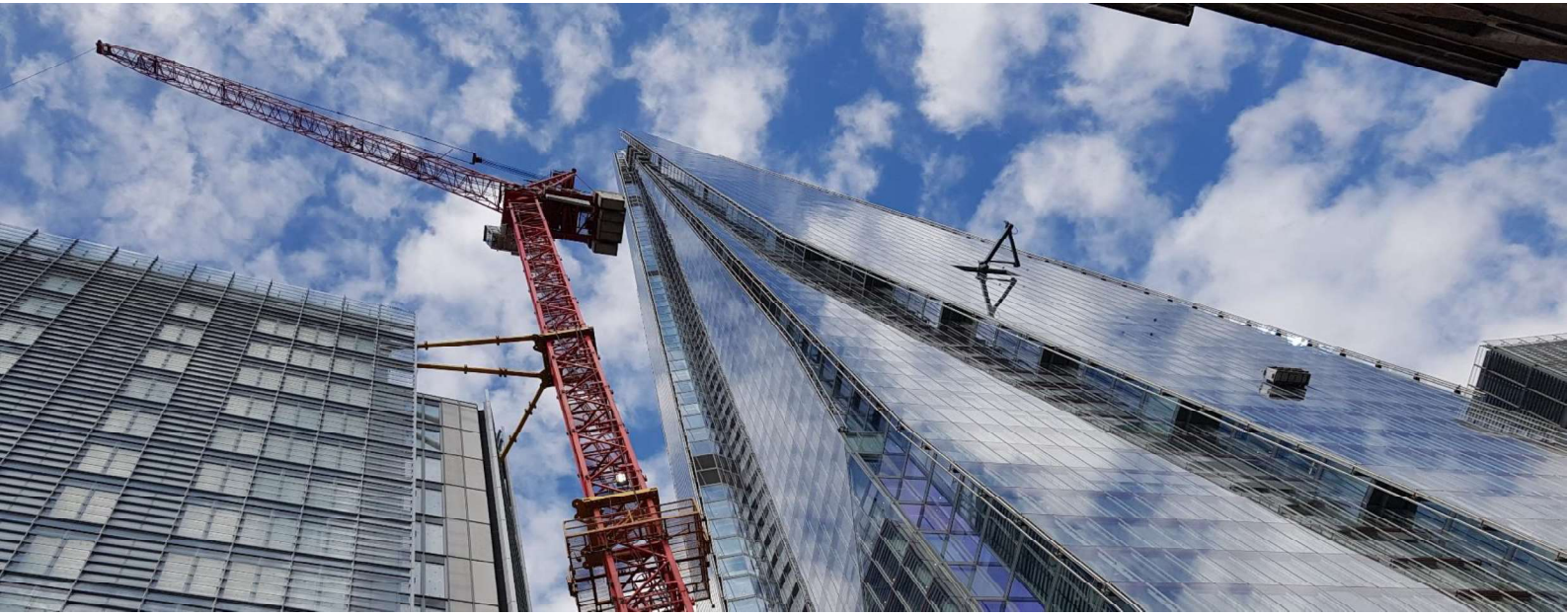
By sharing factsheets and detailed specifications for our models, we aim to enable people to create their own educational resources to support their communities and raise awareness of flood risk management. In some cases, we have established an on-going dialogue with people who have approached us to help them with their own projects. We have helped high school and college students, university researchers, teachers and private individuals.

We're pleased to report that we have supported the creation of new wave tanks at the Seymour Marine Discovery Centre in Santa Cruz USA and a school in New Zealand.

We continue to share our designs for the water safety flume and learning resources with fire and rescue teams and have so far supported services in Leicestershire, London, West Yorkshire, South Yorkshire, Cheshire, North Cumbria, Surrey, Tees, Lancashire, Greater Manchester, Bury, Oregon and Richmond, USA.

Interactive models: Community of Practice

We have published an online map to support a 'Community of Practice' for people who use physical models of water to support education and engagement. The maps show where and how interactive models are being used across the globe and are designed to help educators share ideas, knowledge and inspiration to support outreach activities.



Structure, governance & management

JBA Trust is a company limited by guarantee and is governed by its Memorandum and Articles of Association. It was incorporated on 9 November 2011.

Directors and trustees

We were delighted to welcome two new trustees, Joanne Coles and Peter Jimack, to our board in September 2023. The Trustees serving during the year were as follows:

Trustees	Rob Lamb, JBA (Managing Director of JBA Trust)
	Jeremy Benn, JBA
	Jim Hall, Oxford University
	Keith Beven, Lancaster University (emeritus)
	Nick Russell, Independent financial consultant
	Joanne Coles, Environment Agency
	Peter Jimack, University of Leeds
Secretary	Craig Robson, JBA

Governance

The trustees review the activities of JBA Trust every six months to ensure that they are focused on supporting the purpose of the charity. The review also considers the strategic direction of the charity and considers how planned activities will contribute to public benefit.

We have referred to the guidance contained in the Charity Commission's general guidance on public benefit when reviewing our aims and objectives and in planning our future activities.

Appointment of trustees

On incorporation of the JBA Trust, the Board of Trustees was appointed by invitation.

To preserve independence of the JBA Trust from JBA Group companies, which provide part of its core funding, the JBA Trust's Articles of Association stipulate that the number of trustees connected to or employed by JBA Group shall always be less than half of the total number of trustees appointed at any given time.

The trustees are not remunerated (other than payment to cover travel and accommodation costs where required for JBA Trust business).

Trustee induction and training

Periodically, the trustees meet and are briefed on their legal obligations under charity and company law, updates to the Charity Commission's guidance on public benefit, the content of the Memorandum and Articles of Association and the JBA Trust business plan.

Organisation

The Board of Trustees meets every six months and is responsible for the strategic direction and policy of the charity. A Managing Director is appointed by the trustees to manage the day-to day operations of the charity and is supported by a Programme Manager.

Risk management

The trustees have a risk management strategy which comprises:

- An annual review of the risks the charity may face
- Policies and procedures in place to mitigate those risks
- Plans in place to minimise the impact of the risks should they materialise.
- The principal risk to JBA Trust is financial sustainability. This is mitigated by having a robust reserves policy and a clear financial plan which is reviewed and subsequently approved by the trustees at the start of the financial year.
- JBA Trust adopts policies and procedures from our host, the JBA Group, which are externally validated where applicable. These include policies on: Health and Safety; Energy Use; Environment; Sustainability; Social Responsibility; Equality and Diversity.

Association of Charitable Foundations

As a member of the Association of Charitable Foundations (ACF), we support their vision of diverse, vibrant and effective foundations, working together for social good. We utilise the ACF's Stronger Foundations Initiative resources, in particular the '10 pillars of stronger practice for smaller foundations', to inform our strategy and help enhance our effectiveness.

Financial review

The principal funding source for JBA Trust is JBA Group dividends. JBA Trust also aims to leverage funding for research projects by supporting partners in applying for funding from external organisations, for example UK Research and Innovation (UKRI) grants awarded to university partners for PhD studentships. We also generate a small amount of additional income from hiring out our physical models for use by commercial organisations. Personal donations are processed through an online giving platform that enables Gift Aid to be claimed efficiently.

Reserves Policy

Reserves are required to minimise the financial risks associated with the unlikely event of unplanned or unforeseen expenditure. The JBA Trust maintains sufficient reserves to cover all contractually committed expenditure or liabilities and operating costs for one year.

Plan for future periods

JBA Trust anticipates continued long-term funding from JBA Group. To ensure that the charity maximises the value of its income in carrying out its activities, the strategic plan focuses on continuing to seek match funding for research projects from funding bodies, including Universities and Research Councils. In the future JBA Trust may also wish to generate an income by licensing datasets, results or models generated by research.

The trustees declare that they have approved the Trustees Report above.

R Lamb

R Lamb (Mar 31, 2025 14:35 GMT+1)

On behalf of the trustees

Rob Lamb, Managing Director of JBA Trust

Date: 31/03/2025

JBA TRUST LIMITED

(A company limited by guarantee)

INDEPENDENT EXAMINER'S REPORT
FOR THE YEAR ENDED 31 OCTOBER 2024

INDEPENDENT EXAMINER'S REPORT TO THE TRUSTEES OF JBA TRUST LIMITED (the 'company')

I report to the charity Trustees on my examination of the accounts of the company for the year ended 31 October 2024.

This report is made solely to the company's Trustees, as a body, in accordance with Part 4 of the Charities (Accounts and Reports) Regulations 2008. My work has been undertaken so that I might state to the company's Trustees those matters I am required to state to them in an Independent examiner's report and for no other purpose. To the fullest extent permitted by law, I do not accept or assume responsibility to anyone other than the company and the company's Trustees as a body, for my work or for this report.

RESPONSIBILITIES AND BASIS OF REPORT

As the Trustees of the company (and its directors for the purposes of company law) you are responsible for the preparation of the accounts in accordance with the requirements of the Companies Act 2006 ('the 2006 Act').

Having satisfied myself that the accounts of the company are not required to be audited under Part 16 of the 2006 Act and are eligible for independent examination, I report in respect of my examination of the company's accounts carried out under section 145 of the Charities Act 2011 ('the 2011 Act'). In carrying out my examination I have followed the Directions given by the Charity Commission under section 145(5)(b) of the 2011 Act.

INDEPENDENT EXAMINER'S STATEMENT

I have completed my examination. I can confirm that no matters have come to my attention in connection with the examination giving me cause to believe:

1. accounting records were not kept in respect of the company as required by section 386 of the 2006 Act; or

2. the accounts do not accord with those records; or

3. the accounts do not comply with the accounting requirements of section 396 of the 2006 Act other than any requirement that the accounts give a 'true and fair' view which is not a matter considered as part of an independent examination; or

4. the accounts have not been prepared in accordance with the methods and principles of the Statement of Recommended Practice for accounting and reporting by charities [applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102).

I have no concerns and have come across no other matters in connection with the examination to which attention should be drawn in this report in order to enable a proper understanding of the accounts to be reached.

Signed: Armstrong Watson Audit Limited
Armstrong Watson Audit Limited (Mar 31, 2025 14:37 GMT+1)

Dated: 31/03/2025

Rohan Day FCA

Armstrong Watson Audit Limited
Number 3
Acorn Business Park
Airedale Business Centre
Skipton
North Yorkshire
BD23 2UE

JBA TRUST LIMITED

(A company limited by guarantee)

STATEMENT OF FINANCIAL ACTIVITIES INCORPORATING INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 OCTOBER 2024

	Note	Unrestricted funds 2024 £	Total funds 2024 £	*Total funds* 2023 £
INCOME FROM:				
Donations and legacies	2	**193,414**	**193,414**	152,257
Investments	3	**5,678**	**5,678**	3,685
TOTAL INCOME		**199,092**	**199,092**	155,942
EXPENDITURE ON:				
Charitable activities	4,5,6	**231,804**	**231,804**	217,214
TOTAL EXPENDITURE		**231,804**	**231,804**	217,214
NET EXPENDITURE BEFORE OTHER RECOGNISED GAINS AND LOSSES		**(32,712)**	**(32,712)**	(61,272)
NET MOVEMENT IN FUNDS		**(32,712)**	**(32,712)**	(61,272)
RECONCILIATION OF FUNDS:				
Total funds brought forward		**177,632**	**177,632**	238,904
TOTAL FUNDS CARRIED FORWARD		**144,920**	**144,920**	177,632

The notes on pages 23 to 30 form part of these financial statements.

JBA TRUST LIMITED

(A company limited by guarantee)
REGISTERED NUMBER: 07840801

BALANCE SHEET
AS AT 31 OCTOBER 2024

	Note	£	2024 £	£	2023 £
FIXED ASSETS					
Tangible assets	9		**6,208**		9,063
CURRENT ASSETS					
Debtors	10	**10,622**		-	
Cash at bank and in hand		**130,904**		179,976	
		141,526		179,976	
CREDITORS: amounts falling due within one year	11	**(2,814)**		(11,407)	
NET CURRENT ASSETS			**138,712**		168,569
NET ASSETS			**144,920**		177,632
CHARITY FUNDS					
Unrestricted funds	12		**144,920**		177,632
TOTAL FUNDS			**144,920**		177,632

The company's financial statements have been prepared in accordance with the provisions applicable to companies subject to the small companies regime.

The Trustees consider that the company is entitled to exemption from the requirement to have an audit under the provisions of section 477 of the Companies Act 2006 ("the Act") and members have not required the company to obtain an audit for the year in question in accordance with section 476 of the Act.

The Trustees acknowledge their responsibilities for complying with the requirements of the Companies Act 2006 with respect to accounting records and the preparation of financial statements.

The financial statements have been prepared in accordance with the provisions applicable to companies subject to the small companies regime and in accordance with the provisions of FRS 102 Section 1A - small entities.

The financial statements were approved and authorised for issue by the Trustees on 31/03/2025 and signed on their behalf, by:

R Lamb
R Lamb (Mar 31, 2025 14:35 GMT+1)

R Lamb
Director

The notes on pages 6 to 13 form part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2024

1. ACCOUNTING POLICIES

1.1 Basis of preparation of financial statements

The financial statements have been prepared in accordance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) - (Charities SORP (FRS 102)), the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Companies Act 2006.

JBA Trust Limited meets the definition of a public benefit entity under FRS 102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy.

The principal activity of the company is to enhance understanding and management of risks in the water environment by enabling research, education and training.

The company is a company limited by guarantee incorporated and domiciled in the United Kingdom.

These financial statements have been presented in Pound Sterling as this is the currency of the primary economic environment in which the company operates.

1.2 Company status

The company is a company limited by guarantee. The members of the company are the Trustees named on page 1. In the event of the company being wound up, the liability in respect of the guarantee is limited to £10 per member of the company.

1.3 Going concern

The financial statements have been prepared on the going concern basis. This is based on the continued financial support of its sponsors and creditors, which is confirmed at regular intervals, allied to the maintenance of a robust reserves policy.

1.4 Income

All income is recognised once the company has entitlement to the income, it is probable that the income will be received and the amount of income receivable can be measured reliably.

Donated services or facilities are recognised when the company has control over the item, any conditions associated with the donated item have been met, the receipt of economic benefit from the use of the company of the item is probable and that economic benefit can be measured reliably. In accordance with the Charities SORP (FRS 102), the general volunteer time of the Friends is not recognised and refer to the Trustees' report for more information about their contribution.

On receipt, donated professional services and donated facilities are recognised on the basis of the value of the gift to the company which is the amount the company would have been willing to pay to obtain services or facilities of equivalent economic benefit on the open market; a corresponding amount is then recognised in expenditure in the period of receipt.

Income tax recoverable in relation to donations received under Gift Aid or deeds of covenant is recognised at the time of the donation.

Income tax recoverable in relation to investment income is recognised at the time the investment income is receivable.

1. ACCOUNTING POLICIES (continued)

1.5 Expenditure

Expenditure is recognised once there is a legal or constructive obligation to transfer economic benefit to a third party, it is probable that a transfer of economic benefits will be required in settlement and the amount of the obligation can be measured reliably. Expenditure is classified by activity. The costs of each activity are made up of the total of direct costs and shared costs, including support costs involved in undertaking each activity. Direct costs attributable to a single activity are allocated directly to that activity. Shared costs which contribute to more than one activity and support costs which are not attributable to a single activity are apportioned between those activities on a basis consistent with the use of resources. Central staff costs are allocated on the basis of time spent, and depreciation charges allocated on the portion of the asset's use.

Support costs are those costs incurred directly in support of expenditure on the objects of the company and include project management carried out at Headquarters. Governance costs are those incurred in connection with administration of the company and compliance with constitutional and statutory requirements.

Charitable activities and Governance costs are costs incurred on the company's educational operations, including support costs and costs relating to the governance of the company apportioned to charitable activities.

Grants payable are charged in the year when the offer is made except in those cases where the offer is conditional, such grants being recognised as expenditure when the conditions attaching are fulfilled. Grants offered subject to conditions which have not been met at the year end are noted as a commitment, but not accrued as expenditure.

1.6 Tangible fixed assets and depreciation

A review for impairment of a fixed asset is carried out if events or changes in circumstances indicate that the carrying value of any fixed asset may not be recoverable. Shortfalls between the carrying value of fixed assets and their recoverable amounts are recognised as impairments. Impairment losses are recognised in the Statement of financial activities incorporating income and expenditure account.

Tangible fixed assets are carried at cost, net of depreciation and any provision for impairment. Depreciation is provided at rates calculated to write off the cost of fixed assets, less their estimated residual value, over their expected useful lives on the following bases:

Plant and machinery	-	25% straight line
Motor vehicles	-	25% straight line
Equipment	-	25% straight line

1.7 Interest receivable

Interest on funds held on deposit is included when receivable and the amount can be measured reliably by the company; this is normally upon notification of the interest paid or payable by the Bank.

1.8 Debtors

Trade and other debtors are recognised at the settlement amount after any trade discount offered. Prepayments are valued at the amount prepaid net of any trade discounts due.

1. ACCOUNTING POLICIES (continued)

1.9 Cash at Bank and in hand

Cash at bank and in hand includes cash and short term highly liquid investments with a short maturity of three months or less from the date of acquisition or opening of the deposit or similar account.

1.10 Liabilities and provisions

Liabilities are recognised when there is an obligation at the Balance sheet date as a result of a past event, it is probable that a transfer of economic benefit will be required in settlement, and the amount of the settlement can be estimated reliably. Liabilities are recognised at the amount that the company anticipates it will pay to settle the debt or the amount it has received as advanced payments for the goods or services it must provide. Provisions are measured at the best estimate of the amounts required to settle the obligation. Where the effect of the time value of money is material, the provision is based on the present value of those amounts, discounted at the pre-tax discount rate that reflects the risks specific to the liability. The unwinding of the discount is recognised within interest payable and similar charges.

1.11 Fund accounting

General funds are unrestricted funds which are available for use at the discretion of the Trustees in furtherance of the general objectives of the company and which have not been designated for other purposes.

2. INCOME FROM DONATIONS AND LEGACIES

	Unrestricted funds 2024 £	**Total funds 2024 £**	*Total funds 2023 £*
Donated services	**157,056**	**157,056**	155,372
Donations	**27,464**	**27,464**	26,334
Sales	**590**	**590**	1,830
Sale of assets	**4,799**	**4,799**	-
Other income	**3,505**	**3,505**	(31,279)
Total donations and legacies	**193,414**	**193,414**	152,257
Total 2023	152,257	152,257	

Donated services are provided by the trading subsidiaries of JBA Group Limited and are valued at standard chargeable rates.

3. INVESTMENT INCOME

	Unrestricted funds 2024 £	Total funds 2024 £	*Total funds* 2023 £
Interest received	**5,678**	**5,678**	3,685
Total 2023	3,685	3,685	

4. ANALYSIS OF GRANTS

	Grants to Institutions 2024 £	Grants to Support Activities 2024 £	Total 2024 £	*Total* 2023 £
Grants, Activities undertaken	**41,730**	**132,193**	**173,923**	132,898
Total 2023	21,200	111,698	132,898	

	2024 £	2023 £
Grants to institutions	**41,730**	21,200
Research projects	**58,601**	30,112
Project pipeline development	**21,591**	18,608
Education and training	**51,416**	62,795
Seminars	**585**	183
Total	**173,923**	132,898

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2024

5. SUPPORT COSTS

	Activities undertaken £	Total 2024 £	Total 2023 £
Programme management	**33,743**	**33,743**	49,800
Sundry expenses	**722**	**722**	(1,962)
Communication and website	**13,951**	**13,951**	17,133
Computer consumables and software licences	**350**	**350**	324
Motor and travel expenses	**1,238**	**1,238**	10,097
Office costs	**732**	**732**	25
Insurance	**558**	**558**	512
Legal and professional	**130**	**130**	124
Depreciation	**2,855**	**2,855**	4,479
	54,279	**54,279**	80,532
Total 2023	80,532	80,532	

During the year ended 31 October 2024, the company incurred the following Governance costs:

£NIL (2023 - £*NIL*) included within the table above in respect of Activities undertaken directly.

£NIL (2023 - £*NIL*) included within the table above in respect of Support costs.

6. GOVERNANCE COSTS

	Unrestricted funds 2024 £	Total funds 2024 £	*Total funds* 2023 £
Accountancy fees	**3,240**	**3,240**	3,410
Bank charges	**362**	**362**	374
	3,602	**3,602**	3,784

7. NET INCOME/(EXPENDITURE)

This is stated after charging:

	2024 £	2023 £
Depreciation of tangible fixed assets:		
- owned by the charity	**2,855**	4,479

During the year, no Trustees received any remuneration (2023 - £NIL).
During the year, no Trustees received any benefits in kind (2023 - £NIL).
During the year, no Trustees received any reimbursement of expenses (2023 - £NIL).

8. EMPLOYEES

The company has no employees other than the Trustees, in both the current and previous year.

9. TANGIBLE FIXED ASSETS

	Plant and machinery £	Motor vehicles £	Equipment £	Total £
Cost				
At 1 November 2023	**48,607**	**20,100**	**1,607**	**70,314**
Disposals	**-**	**(20,100)**	**-**	**(20,100)**
At 31 October 2024	**48,607**	**-**	**1,607**	**50,214**
Depreciation				
At 1 November 2023	**39,544**	**20,100**	**1,607**	**61,251**
Charge for the year	**2,855**	**-**	**-**	**2,855**
On disposals	**-**	**(20,100)**	**-**	**(20,100)**
At 31 October 2024	**42,399**	**-**	**1,607**	**44,006**
Net book value				
At 31 October 2024	**6,208**	**-**	**-**	**6,208**
At 31 October 2023	9,063	-	-	9,063

10. DEBTORS

	2024 £	2023 £
Trade debtors	**1,180**	-
Other debtors	**9,442**	-
	10,622	-

11. CREDITORS: Amounts falling due within one year

	2024 £	2023 £
Trade creditors	**663**	8,691
Other creditors	**-**	566
Accruals and deferred income	**2,151**	2,150
	2,814	11,407

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2024

12. STATEMENT OF FUNDS

STATEMENT OF FUNDS - CURRENT YEAR

	Balance at 1 November 2023 £	Income £	Expenditure £	Balance at 31 October 2024 £
Unrestricted funds				
General Funds	**177,632**	**199,092**	**(231,804)**	**144,920**

STATEMENT OF FUNDS - PRIOR YEAR

	Balance at 1 November 2022 £	*Income* £	*Expenditure* £	*Balance at 31 October 2023* £
General Funds	238,904	155,942	(217,214)	177,632
Total of funds	238,904	155,942	(217,214)	177,632

13. ANALYSIS OF NET ASSETS BETWEEN FUNDS

ANALYSIS OF NET ASSETS BETWEEN FUNDS - CURRENT YEAR

	Unrestricted funds 2024 £	Total funds 2024 £
Tangible fixed assets	**6,209**	**6,209**
Current assets	**141,526**	**141,526**
Creditors due within one year	**(2,815)**	**(2,815)**
	144,920	**144,920**

ANALYSIS OF NET ASSETS BETWEEN FUNDS - PRIOR YEAR

	Unrestricted funds 2023 £	*Total funds* 2023 £
Tangible fixed assets	9,063	9,063
Current assets	179,976	179,976
Creditors due within one year	(11,407)	(11,407)
	177,632	177,632

14. RELATED PARTY TRANSACTIONS

During the year, donations were received from JBA Risk Management Limited of £27,464 (2023 - £26,334).

Included within debtors, amounts falling due within one year is an amount of £9,442 (2023 - £Nil) due from Jeremy Benn Associates Limited. During the year, donated services were received from Jeremy Benn Associates Limited of £155,628 (2023 - £153,666).

Both JBA Risk Management Limited and Jeremy Benn Associates Limited are under common control by virtue of the shareholdings and trusteeship of J R Benn.

JBA TRUST LIMITED

England & Wales - Charity number 1150278

Accounts

Company Registration Number 07840801

Charity number: 1150278

JBA TRUST LIMITED

UNAUDITED
FINANCIAL STATEMENTS

31 OCTOBER 2023

(A company limited by guarantee)

ArmstrongWatson®

Accountants, Business & Financial Advisers

JBA TRUST LIMITED

(A company limited by guarantee)

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JBA TRUST LIMITED

(A company limited by guarantee)

REFERENCE AND ADMINISTRATIVE DETAILS OF THE COMPANY, ITS TRUSTEES AND ADVISERS FOR THE YEAR ENDED 31 OCTOBER 2023

Trustees

Rob Lamb, JBA (Managing Director)
Jeremy Benn, JBA
Jim Hall, University Professor
Keith Beven, University Professor Emeritus
Nick Russell, Independent Financial Consultant
Joanne Coles, Senior Advisor (Appointed 3 September 2023)
Peter Jimack, University Professor (Appointed 3 September 2023)

Company registered number

07840801

Charity registered number

1150278

Registered office

1 Broughton Park, Old Lane North, Broughton, Skipton, North Yorkshire, BD23 3FD

Company secretary

C Robson

Independent examiners

Armstrong Watson Audit Limited, Number 3, Acorn Business Park, Airedale Business Centre, Skipton, North Yorkshire, BD23 2UE

JBA TRUST LIMITED

(A company limited by guarantee)

TRUSTEES' REPORT
FOR THE YEAR ENDED 31 OCTOBER 2023

The Trustees present their annual report together with the financial statements of the company for the 1 November 2022 to 31 October 2023. The Trustees confirm that the Annual Report and financial statements of the company comply with the current statutory requirements, the requirements of the company's governing document and the provisions of the Statement of Recommended Practice (SORP), applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) as amended by Update Bulletin 1 (effective 1 January 2015).

GOING CONCERN

The financial statements have been prepared on the going concern basis. This is based on the continued financial support of its sponsors and creditors, which is confirmed at regular intervals, allied to the maintenance of a robust reserves policy.

TRUSTEES' RESPONSIBILITIES STATEMENT

The Trustees (who are also directors of JBA Trust Limited for the purposes of company law) are responsible for preparing the Trustees' report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

Company law requires the Trustees to prepare financial statements for each financial year. Under company law the Trustees must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the charitable company and of the incoming resources and application of resources, including the income and expenditure, of the charitable company for that period. In preparing these financial statements, the Trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP;
- make judgments and accounting estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue in operation.

The Trustees are responsible for keeping adequate accounting records that are sufficient to show and explain the charitable company's transactions and disclose with reasonable accuracy at any time the financial position of the charitable company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

This report was approved by the Trustees, on 23/05/2024 and signed on their behalf by:

Rob Lamb

Rob Lamb (May 23, 2024 10:35 GMT+1)

Rob Lamb, Managing Director of JBA Trust

Director's Report

I am delighted to present the annual report for our financial year November 2022 to October 2023. The JBA Trust has continued to offer valuable support for the creation, sharing and application of knowledge about risks and resilience around the water cycle.

This year we have renewed many partnerships and created new ones. We prioritised engagement activities that involve working in depth with others to achieve change and connect with groups relatively under-represented in sectors and disciplines most relevant to our work. Interest in our physical demonstration models and supporting resources continues to grow, with the demand exceeding our capacity. So, we have begun to establish a community of practice around the demonstration models by mapping the network of people and organisations who have built similar models, used our designs or developed similar expertise independently.

Our support for research spread over many projects. This year we helped 11 doctoral researchers and 10 people undertaking other postgraduate studies.

Seven peer-reviewed scientific publications were produced from research we supported. We also dedicated significant time to help our network of academic partners secure new funding for research and training across a range of scientific and technical disciplines. In total, we worked with more than 10 university groups to lend support to their proposals for doctoral training or research funds.

As a corporate foundation, most of our resources are donated by our sponsors, the JBA Group of companies. We have now facilitated more than 36,000 hours of work by JBA colleagues to help share their knowledge and expertise. On behalf of the trustees I thank those colleagues and the many partners with whom we have worked collaboratively, helping us to deliver on our charitable objectives.

Rob Lamb

Rob Lamb (May 23, 2024 10:35 GMT+1)

Rob Lamb, Managing Director

Date: 23/05/2024



Our purpose and activities

1

JBA Trust is a charity established and funded by the JBA Group of companies. We aim to help improve people's resilience to environmental risks by sharing knowledge. We do this by enabling research, education and engagement.

We work with academic researchers, NGOs, charities and the JBA Group of companies in four key areas:

- Facilitating collaboration between academia and industry to deliver high quality scientific research.
- Publishing and disseminating knowledge, enabling shared understanding and good practice.
- Supporting post-graduate training by providing technical expertise and financial bursaries for MSc and PhD studentships.
- Engaging with schools, charities and voluntary groups to share inspiration and learning resources.

This annual report reviews the activities of the JBA Trust over the past year and how our work has delivered public benefit.



Science and research

2

We facilitate collaboration between academia and industry to deliver high quality scientific research. By publishing and communicating research outputs, we enable knowledge exchange and share best practice.

Collaborative research

In 2022-23 we worked with universities, research institutions, public sector and charitable organisations. The highlights and outputs of our collaborative research projects are summarised below.

Support for Centres for Doctoral Training (CDTs)

In 2022, the UK government announced significant new investment in the provision of high quality, cohort-based doctoral education through Centres for Doctoral Training (CDTs).

The Engineering and Physical Sciences Research Council (EPSRC) is committing up to £324 million to support approximately 40 CDTs across the engineering and physical science landscape. The Natural Environment Research Council (NERC) is committing over £10 million to support four CDTs to tackle the most challenging environmental science issues including flood management and freshwater quality.

We worked closely with university partners to support the co-development of centres that focus on the themes of flood and climate resilience, uncertainty and risk, and the underpinning data science that supports evidence-led decision making. As well as helping to identify knowledge gaps and needs within these themes, we aim to support the successful CDTs through PhD sponsorship and placement provision.

UK Flood Hydrology Roadmap

The flood hydrology roadmap is a 25-year vision and plan to advance all aspects of flood hydrology in the United Kingdom. It was developed with inputs from more than 270 individuals from 50 organisations working in hydrology, flood management and related topics.

We have supported the roadmap project since it started in 2018 through membership of its steering group and by contributing to publications and presentations. This year, as delivery of the roadmap picked up pace, we have supported it by:

- chairing the newly-formed roadmap Science and Technical Advisory Group, which met for the first time in January 2023 and three more times over the reporting year
- providing support to the roadmap's governance board on behalf of the advisory group
- delivering a joint CIWEM/British Hydrological Society webinar about the roadmap, part of the CIWEM Flood Resilience series, on 21 June 2023

Research outputs	Type	Link
Flood Hydrology Roadmap update	Webinar	https://www.youtube.com/watch?v=iJiRI4O6r4Y

Abrupt Wave Front floods

'Abrupt wave front' floods (AWF), also known as flash floods, describe an extremely rapid rate of rise in water level and discharge. They are a significant hazard to river users and are caused by extreme rainfall events on steep upland catchments which can then move downstream for tens of kilometres.

The characteristics and downstream transmission of AWF floods are described and analysed in a paper published in Hydrology Research by Samuel Watkiss and David Archer. The paper combines research undertaken by Sam whilst at the University of Leeds, and work by David Archer. We supported Sam for part of his placement year and dissertation.

Historical data for events in Pennine catchments in northern England were extracted from the British Chronology of Flash Floods, a freely available resource hosted by JBA Trust.

Research outputs	Type	Link
The characteristics of 'abrupt wave front' floods on Pennine catchments and their transmission downstream	Journal paper	https://doi.org/10.2166/nh.2023.126

Wet Canopy Evaporation

This research is a collaboration with the Fluid Dynamics Centre for Doctoral Training (CDT) at the University of Leeds, with input from Barry Hankin at JBA Consulting and the NERC Q-NFM project team at Lancaster Environment Centre.

We supported a team of MRes students in the Fluid Dynamics CDT to investigate the plausibility of high rates of wet canopy evaporation during heavy rainfall events and possible implications for tree planting as a type of natural flood management. The MRes team developed an outreach demonstrator model to help explain the concepts in the project.

Retention time tool

One of the strategies for natural flood management in the UK is the use of in-stream barriers to retain water during flood events. We have published and updated a web page containing a spreadsheet tool to link leaky barrier structural design to backwater volume and increase in retention time, allowing exploration of the impact of varying barrier and channel structural parameters during the design phase or for the post-hoc evaluation of existing barriers.

The tool was developed by Elizabeth Follett, Royal Academy of Engineering Research Fellow at Liverpool University, and our trustee Keith Beven.

Research outputs	Type	Link
Leaky barrier retention time tool	Spreadsheet and webpage	Leaky barrier retention times for Natural Flood Management interventions

Doctoral research projects

Our collaboration with universities across the UK enables us to support graduate researchers (research students) working on doctoral projects to develop advanced skills and deliver high quality research that helps enhance the understanding of a wide range of risks in the environment. We support doctoral researchers through a variety of programmes including doctoral training centres funded by UK Research and Innovation (UKRI).

This year, we were delighted to see another of our graduate researchers, Georgios Sarailidis, successfully complete his PhD.

Information about all our PhD projects can be found at: https://www.jbatrust.org/funding-and-support/early-career-researchers/

PhD project outputs

We are pleased to be able to share this year's outputs from the projects, including peer reviewed publications.

- Helen Hooker, studying at Reading University, published her first paper in the Journal of Hydrology on 'Analysis of 2D inundation patterns to identify skilful scales of comparison'. The paper is available at: https://doi.org/10.1016/j.jhydrol.2022.128170

  Helen also published an article on our website that aimed to make the academic concepts in her journal paper more accessible to a wider audience. The article discusses how earth observation data can identify flooded areas and is available here: Improving forecast flood maps using earth observation data : JBA Trust

- Luke Jenkins, studying at the University of Southampton, published his first paper in Natural Hazards on 'The temporal clustering of storm surge, wave height, and high sea level exceedances around the UK coastline'. The paper is available at: https://link.springer.com/article/10.1007/s11069-022-05617-z

- Jake Grainger, who has completed his PhD at Lancaster University, published a paper on how statistical approaches can help estimate directional ocean wave models. The paper is available at: https://doi.org/10.1093/jrsssc/qlad006

- Zora van Leeuwen, who has completed her PhD at the University of Leeds, published two papers on how leaky dams in upland catchments can affect flood hydrology. The papers are available at: https://doi.org/10.1016/j.jhydrol.2023.130448 and https://doi.org/10.1016/j.jhydrol.2023.130449



Research publications

3 During the year, we supported and co-authored studies published as papers in peer-reviewed scientific journals.

Title and link	Journal	Authors	Status
The temporal clustering of storm surge, wave height, and high sea level exceedances around the UK coastline	Natural Hazards	LJ Jenkins, ID Haigh, P Camus, D Pender, J Sansom, J, R Lamb & H Kassem.	Published
The characteristics of 'abrupt wave front' floods on Pennine catchments, northern England, and their transmission downstream	Hydrology Research	S Watkiss & D Archer.	Published
Using physical models to improve geographical learning	Teaching Geography	B Brady, K Suter, R Lamb & A Scott.	Published
A multivariate pseudo-likelihood approach to estimating directional ocean wave models	J. Royal Statistical Society Series C: Applied Statistics	JP Grainger, AM Sykulski, K Ewans, HF Hansen, P Jonathan	Published
Assessing the spatial spread–skill of ensemble flood maps with remote-sensing observations	Natural Hazards and Earth System Sciences	H Hooker, S Dance, D Mason, J Bevington & K Shelton.	Published
Quantifying the natural flood management potential of leaky dams in upland catchments, Part I: A data-based modelling approach	Journal of Hydrology	Z.R. van Leeuwen, M.J. Klaar, M.W. Smith, L. Brown	Accepted
Quantifying the natural flood management potential of leaky dams in upland catchments, Part II: Leaky dam impacts on flood peak magnitude	Journal of Hydrology	Z.R. van Leeuwen, M.J. Klaar, M.W. Smith, L. Brown	Accepted



Support for students in higher education

4

There are many academic subjects that generate the knowledge and understanding needed to manage risks in our environment. Whilst undergraduate courses such as Geography and Environmental or Physical Sciences are important, the relevant specialist training often comes into greater focus at postgraduate (PGCert, Masters or doctoral) level. We therefore emphasise support for students and projects at this level.

The British Hydrological Society, JBA Trust and Environment Agency Studentship Awards

In 2022-23 we continued our partnership established in 2011 with the British Hydrological Society (BHS) and the Environment Agency to support students working towards MSc (or equivalent level) qualifications in hydrology, water resources, catchment management and other related subjects. We awarded bursaries of £2,500 and have now made awards to 107 students at 25 different UK universities since 2011.

We also asked recipients of the bursaries about what difference the awards had made:

"The award definitely made postgraduate education more accessible to me."

"I wouldn't have been able to do my MSc without your financial support and wouldn't be where I am today without it – to this day your support means a lot!"

"Without this Scholarship, I would not have been able to complete my course."

"It allowed me to go to my first-choice university."

Applications for these bursaries were managed using the web-based system that we developed in 2014 and have maintained since. This continued to work well and enabled us to coordinate the assessment process with the BHS and Environment Agency effectively.

We continue to collect information on equality, diversity and inclusion (EDI) as part of the application process. The aim is to build an understanding of the diversity of recipients, alongside the partners' ambitions to ensure that the awards are inclusive.

Flood and Coastal Risk Management Scholarships

The challenges of more frequent extreme weather and new flood risk responsibilities mean that there is a growing need for skilled water and environmental risk management professionals. This year we continued our support by funding two scholarships for Lancaster University's Flood and Coastal Risk Management Postgraduate Certificate course.

> *"Working for The Rivers Trust, I'm involved in projects across the country looking to implement natural flood management at scale. I chose to apply for the course to enhance my understanding of flood and coastal risk management.*
>
> *Thanks to the support of JBA Trust, I can study whilst still being able to work on these projects. I hope to apply what I learn during the course through my work with the Rivers Trust Movement, taking an evidence-based approach to mitigating flood risk and improving the health and resilience of our catchments.*
>
> *The course will help towards achieving our shared goals, offering the opportunity to combine theory with practical application for the benefit of communities and catchments alike."*
>
> - Tom Gall, 2023 PGCert Scholarship recipient

Masters projects

We help to provide MSc (or equivalent degree level) students with placements, technical expertise and access to software resources and case study data, as well as offering a platform for them to share highlights from their research projects. The students we help have gained insight into how methodologies and techniques are applied in industry and have an opportunity to see how they will be able to use their skills in a future career.

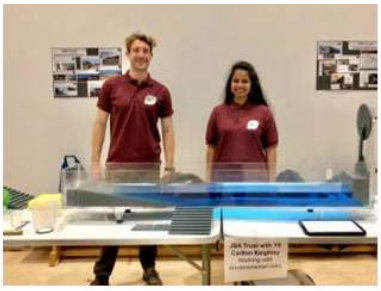
In 2022-23, we supported George Williams, who was studying Sustainability and Consultancy at the University of Leeds. George's research aimed to improve understanding of the number and location of culverts that may be acting as a barrier to fish passage. With our help as a facilitator, George also supported Ben Bluck's PhD research at Southampton, providing benefit to both students.

Summer Internship

This summer we hosted Katie Russell, an Environmental Sciences MSc student, for a 5-week internship to develop a comprehensive database that shares spatial information about published academic research on Natural Flood Management (NFM) or coastal nature-based solutions. Katie processed a database of 791 journal papers and technical reports, published between 2017 and 2023, and extracted location data, metrics of scale and research meta-data from each paper.

We aim to make this available as an online mapping resource to help practitioners and the academic community to easily identify and visualise the locations (e.g. river catchments, field sites) where data and published research are available.









Learning and engagement

5 We support a wide range of activities aimed at encouraging students at schools and universities to develop or enhance their interests in water and environmental management, which could also ultimately lead them to pursue careers in the field. Our learning and engagement activities also extend to the wider community, and to flood risk management professionals.

In 2022-23, we worked with many different organisations to develop learning resources and deliver activities to support engagement and education.

Public engagement in resilience and flood risk

This year, we chose to develop partnerships with organisations that have strong relationships with local communities or have a well-established outreach and engagement track record. This approach helped us target our resources more effectively and enabled us to reach more diverse communities.

We supported the **Rochdale Science Extravaganza** in March 2023, a free event that provided a wide range of science, technology, engineering, art and maths (STEAM) activities for the whole community. Organised by the Rochdale Science Initiative and Bangladesh Association and Community Project (BACP), the theme of 'Climate Change and Sustainability' brought together scientists, researchers, artists and others with an aim of inspiring and encouraging people to explore science and to consider their part in creating a sustainable future. Over 1,460 people attended the event, and visitors used our augmented reality sandbox to explore flood risk and see how climate change might affect flooding in future.

We also supported the **London Science Museum 'Science on a Sphere'** exhibition this summer in partnership with volunteers from the Environment Agency. Our volunteers used our augmented reality sandbox to explore climate change, resilience and flood risk. During the 20-day exhibition the museum welcomed 227,354 visitors. Over 6,400 people engaged with the volunteers, activities and demonstrations, and 78% of the people who left feedback will take action on flood risk or climate change based on their experience at the exhibition.

Supporting STEM in schools

This year, we worked with the Transpennine STEM Ambassador Hub on a STEM Interventions project that enabled us to build a programme of engagement with **Carlton School in Keighley**, a local school that had identified the need for additional STEM support. The STEM Ambassador network funded training for our volunteers, delivered by the Science Museum Group Academy, to help them develop session content relating to sustainability and climate change for Key Stage 3 students.

We delivered a full day of careers and coastal risk management sessions to over 200 geography students at **St Ambrose Barlow RC High School in Salford**. Our volunteers talked to Year 9 students about careers in flood risk management and demonstrated the wave tank to show how effective different types and combinations of coastal defences are at preventing overtopping and flood risk.

As part of a 'Water Risks' themed day at **Ermysted's Grammar School in Skipton**, we worked with the University of Nottingham and North Yorkshire Fire and Rescue Service to deliver interactive sessions about water and flood risk management. The Year 8 students used our hands-on physical models (the PARM, wave tank and river flume) to understand how water behaves in the environment and how to stay safe in and around rivers.

Industrial Cadets

In July 2023 we hosted 31 Industrial Cadets who joined us as part of a week of STEM related work experience with Yorkshire Water. We hosted the group with JBA Consulting at their Saltaire offices and explored flood risk, water safety, fish passage, river engineering and environmental engineering and sustainability careers as well as visiting Salts Mill weir fish pass.

Water safety

Since we partnered with North Yorkshire Fire and Rescue Service and Hydrotec to build a specific water safety flume in 2022, we have helped other fire services and water safety charities to source or create their own water safety flumes. So far, we have shared our designs and learning resources with fire and rescue teams in Leicestershire, London, West Yorkshire, South Yorkshire, Cheshire, North Cumbria, Surrey, Tees, Lancashire, Greater Manchester, Bury, Oregon and Richmond, USA.

In October 2023, we offered our Big River Flume to the London Fire Brigade to be used to demonstrate water safety in a proposed new 'Water Safety Centre of Excellence' based in Twickenham in partnership with the RNLI.

CityZen

We worked with the Institute of Civil Engineering's Engagement and Inspiration Team again this year to support the CityZen competition by joining the panel of judges. CityZen focuses on developing the infrastructure for a town within the context of climate change, flood risk and sustainability. The game helps engage students aged 16–18 with civil engineering, as well as helping develop important skills for work and study, such as problem-solving, teamwork, critical thinking and communication. The final award is based on a video submission by the teams. This year, more than 190 schools took part, with the awards being announced in March 2024.

Digital learning resources

Our digital learning resources have elements of engineering, maths and geography included in each topic in the context of flood risk, water management, weather and climate. They are packaged by age group and include videos, worksheet activities, case studies and exercises.

All our learning resources can be accessed and downloaded at: www.jbatrust.org/learning-resources/

Sharing experience

This year we published a paper on 'Using physical models to improve geographical learning' in the Teaching Geography journal to highlight how teachers could incorporate physical model into their practice.

Physical models

Our physical models of catchments, rivers and coasts enable us to bring to life topics including flood risk, coastal and river engineering and nature-based solutions.

Our collection includes four different sized hydraulic river flumes, four wave tanks, an augmented reality sandbox and a Projection Augmented Relief Model (PARM).



Building our reach and enabling knowledge exchange

6

Digital engagement

Our website (www.jbatrust.org) enables people to easily access all our publications and educational resources, as well as find information about JBA Trust and our research projects. It continues to help us deliver our charitable objectives of sharing best practice and supporting engagement and education.

In 2022-23 we received 105 direct enquiries about research support, our physical models, bursaries and scholarships and support for educational activities and events.

JBA Trust's YouTube channel hosts all our video resources and we now have over 54,000 subscribers. Across all social media platforms, our videos have received over 35 million views.

We also use Twitter and LinkedIn to publicise research outputs, new resources, publications or scholarships and awards.

Global reach

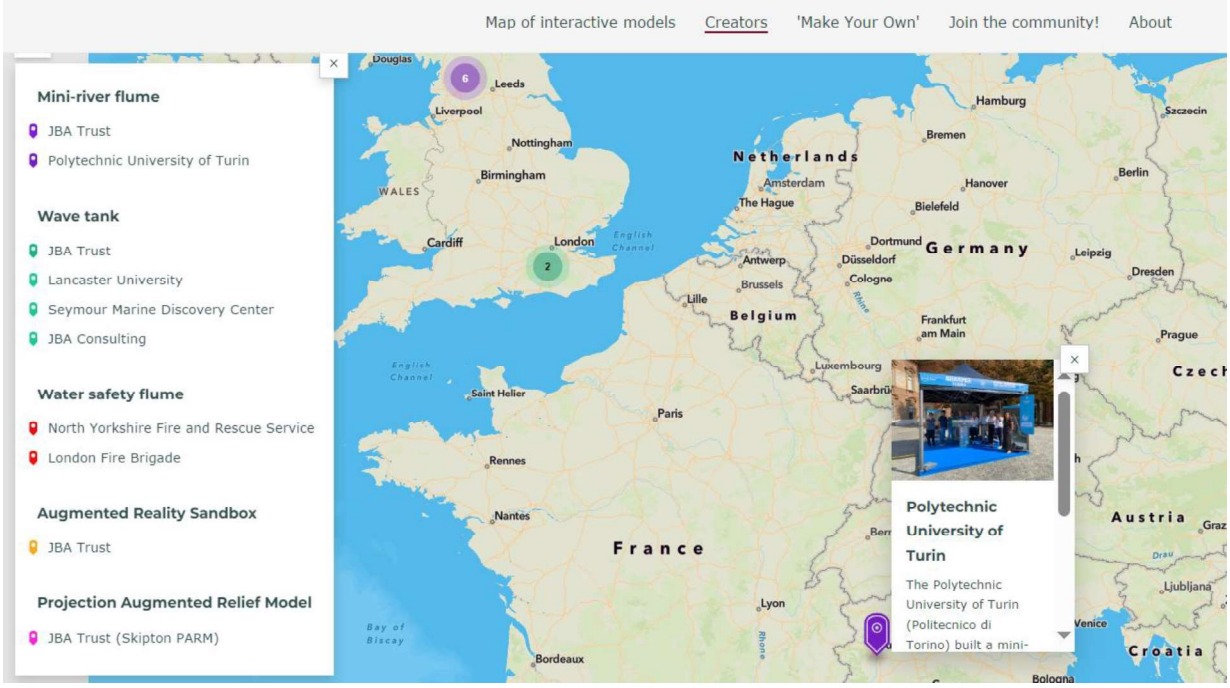
This year we responded to over 66 requests from around the world for support and assistance from people who, having seen our physical model and weather station resources, would like to build their own or set up their own educational project. The contacts came through social media or our website contact pages.

By sharing factsheets and detailed specifications for our models, we aim to enable people to create their own educational resources to support their communities and raise awareness of flood risk management. In some cases, we have established an on-going dialogue with people who have approached us to help them with their own projects. We have helped high school and college students, university researchers, teachers and private individuals.

Interactive models: Community of Practice

We are developing an online map to support a 'Community of Practice' for people who use physical models of water to support education and engagement. The maps show where and how interactive models are being used across the globe and are designed to help the community share ideas, knowledge and inspiration to support education and outreach activities.

The interactive map is available to view here: https://arcg.is/fbDf80





Structure, governance and management

7 JBA Trust is a company limited by guarantee and is governed by its Memorandum and Articles of Association. It was incorporated on 9 November 2011.

Directors and trustees

We were delighted to welcome two new trustees, Joanne Coles and Peter Jimack, to our board in September 2023. The Trustees serving during the year were as follows:

Trustees	Rob Lamb, JBA (Managing Director of JBA Trust)
	Jeremy Benn, JBA
	Jim Hall, Oxford University
	Keith Beven, Lancaster University (emeritus)
	Nick Russell, Independent financial consultant
	Joanne Coles, Environment Agency
	Peter Jimack, University of Leeds
Secretary	Craig Robson

Governance

The trustees review the activities of JBA Trust every six months to ensure that they are focused on supporting the purpose of the charity. The review also considers the strategic direction of the charity and considers how planned activities will contribute to public benefit.

We have referred to the guidance contained in the Charity Commission's general guidance on public benefit when reviewing our aims and objectives and in planning our future activities.

Appointment of trustees

On incorporation of the JBA Trust, the Board of Trustees was appointed by invitation.

To preserve independence of the JBA Trust from JBA Group companies, which provide part of its core funding, the JBA Trust's Articles of Association stipulate that the number of trustees connected to or employed by JBA Group shall always be less than half of the total number of trustees appointed at any given time.

The trustees are not remunerated (other than payment to cover travel and accommodation costs where required for JBA Trust business).

Trustee induction and training

Periodically, the trustees meet and are briefed on their legal obligations under charity and company law, updates to the Charity Commission's guidance on public benefit, the content of the Memorandum and Articles of Association and the JBA Trust business plan.

Organisation

The Board of Trustees meets every six months and is responsible for the strategic direction and policy of the charity. A Managing Director is appointed by the trustees to manage the day-to day operations of the charity and is supported by a Programme Manager.

Risk management

The trustees have a risk management strategy which comprises:

- An annual review of the risks the charity may face
- Policies and procedures in place to mitigate those risks
- Plans in place to minimise the impact of the risks should they materialise.

The principal risk to JBA Trust is financial sustainability. This is mitigated by having a robust reserves policy and a clear financial plan which is reviewed and subsequently approved by the trustees at the start of the financial year.

JBA Trust adopts policies and procedures from our host, the JBA Group, which are externally validated where applicable. These include policies on: Health and Safety; Energy Use; Environment; Sustainability; Social Responsibility; Equality and Diversity.

Association of Charitable Foundations

As a member of the Association of Charitable Foundations (ACF), we support their vision of diverse, vibrant and effective foundations, working together for social good. We utilise the ACF's Stronger Foundations Initiative resources, in particular the '10 pillars of stronger practice for smaller foundations', to inform our strategy and help enhance our effectiveness.

Financial review

The principal funding source for JBA Trust is JBA Group dividends. JBA Trust also aims to leverage funding for research projects by supporting partners in applying for funding from external organisations, for example UK Research and Innovation (UKRI) grants awarded to university partners for PhD studentships. We also generate a small amount of additional income from hiring out our physical models for use by commercial organisations. Personal donations are processed through an online giving platform that enables Gift Aid to be claimed efficiently.

8

Reserves Policy

Reserves are required to minimise the financial risks associated with the unlikely event of unplanned or unforeseen expenditure. The JBA Trust maintains sufficient reserves to cover all contractually committed expenditure or liabilities and operating costs for one year.

Plan for future periods

JBA Trust anticipates continued long-term funding from JBA Group. To ensure that the charity maximises the value of its income in carrying out its activities, the strategic plan focuses on continuing to seek match funding for research projects from funding bodies, including Universities and Research Councils. In the future JBA Trust may also wish to generate an income by licensing datasets, results or models generated by research.

The trustees declare that they have approved the Trustees Report above.

Rob Lamb

Rob Lamb (May 23, 2024 10:35 GMT+1)

On behalf of the trustees

Rob Lamb, Managing Director of JBA Trust

Date: 23/05/2024

JBA TRUST LIMITED

(A company limited by guarantee)

INDEPENDENT EXAMINER'S REPORT FOR THE YEAR ENDED 31 OCTOBER 2023

INDEPENDENT EXAMINER'S REPORT TO THE TRUSTEES OF JBA TRUST LIMITED (the 'company')

I report to the charity Trustees on my examination of the accounts of the company for the year ended 31 October 2023.

This report is made solely to the company's Trustees, as a body, in accordance with Part 4 of the Charities (Accounts and Reports) Regulations 2008. My work has been undertaken so that I might state to the company's Trustees those matters I am required to state to them in an Independent examiner's report and for no other purpose. To the fullest extent permitted by law, I do not accept or assume responsibility to anyone other than the company and the company's Trustees as a body, for my work or for this report.

RESPONSIBILITIES AND BASIS OF REPORT

As the Trustees of the company (and its directors for the purposes of company law) you are responsible for the preparation of the accounts in accordance with the requirements of the Companies Act 2006 ('the 2006 Act').

Having satisfied myself that the accounts of the company are not required to be audited under Part 16 of the 2006 Act and are eligible for independent examination, I report in respect of my examination of the company's accounts carried out under section 145 of the Charities Act 2011 ('the 2011 Act'). In carrying out my examination I have followed the Directions given by the Charity Commission under section 145(5)(b) of the 2011 Act.

INDEPENDENT EXAMINER'S STATEMENT

I have completed my examination. I can confirm that no matters have come to my attention in connection with the examination giving me cause to believe:

1. accounting records were not kept in respect of the company as required by section 386 of the 2006 Act; or

2. the accounts do not accord with those records; or

3. the accounts do not comply with the accounting requirements of section 396 of the 2006 Act other than any requirement that the accounts give a 'true and fair' view which is not a matter considered as part of an independent examination; or

4. the accounts have not been prepared in accordance with the methods and principles of the Statement of Recommended Practice for accounting and reporting by charities [applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102).

I have no concerns and have come across no other matters in connection with the examination to which attention should be drawn in this report in order to enable a proper understanding of the accounts to be reached.

Signed: Armstrong Watson Audit Limited
Armstrong Watson Audit Limited (May 23, 2024 10:39 GMT+1)

Dated: 23/05/2024

Rohan Day FCA

Armstrong Watson Audit Limited
Number 3
Acorn Business Park
Airedale Business Centre
Skipton
North Yorkshire
BD23 2UE

JBA TRUST LIMITED

(A company limited by guarantee)

STATEMENT OF FINANCIAL ACTIVITIES INCORPORATING INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 OCTOBER 2023

	Note	Unrestricted funds 2023 £	Total funds 2023 £	*Total funds* 2022 £
INCOME FROM:				
Donations and legacies	2	**152,257**	**152,257**	180,789
Investments	3	**3,685**	**3,685**	3,775
TOTAL INCOME		**155,942**	**155,942**	184,564
EXPENDITURE ON:				
Charitable activities	4,5,6	**217,214**	**217,214**	223,464
TOTAL EXPENDITURE		**217,214**	**217,214**	223,464
NET EXPENDITURE BEFORE OTHER RECOGNISED GAINS AND LOSSES		**(61,272)**	**(61,272)**	(38,900)
NET MOVEMENT IN FUNDS		**(61,272)**	**(61,272)**	(38,900)
RECONCILIATION OF FUNDS:				
Total funds brought forward		**238,904**	**238,904**	277,804
TOTAL FUNDS CARRIED FORWARD		**177,632**	**177,632**	238,904

The notes on pages 6 to 13 form part of these financial statements.

JBA TRUST LIMITED

(A company limited by guarantee)
REGISTERED NUMBER: 07840801

BALANCE SHEET
AS AT 31 OCTOBER 2023

	Note	£	2023 £	£	2022 £
FIXED ASSETS					
Tangible assets	9		**9,063**		2,124
CURRENT ASSETS					
Debtors	10	-		29,800	
Cash at bank and in hand		**179,976**		231,086	
		179,976		260,886	
CREDITORS: amounts falling due within one year	11	**(11,407)**		(24,106)	
NET CURRENT ASSETS			**168,569**		236,780
NET ASSETS			**177,632**		238,904
CHARITY FUNDS					
Unrestricted funds	12		**177,632**		238,904
TOTAL FUNDS			**177,632**		238,904

The company's financial statements have been prepared in accordance with the provisions applicable to companies subject to the small companies regime.

The Trustees consider that the company is entitled to exemption from the requirement to have an audit under the provisions of section 477 of the Companies Act 2006 ("the Act") and members have not required the company to obtain an audit for the year in question in accordance with section 476 of the Act.

The Trustees acknowledge their responsibilities for complying with the requirements of the Companies Act 2006 with respect to accounting records and the preparation of financial statements.

The financial statements have been prepared in accordance with the provisions applicable to companies subject to the small companies regime and in accordance with the provisions of FRS 102 Section 1A - small entities.

The financial statements were approved and authorised for issue by the Trustees on 23/05/2024 and signed on their behalf, by:

Rob Lamb
Rob Lamb (May 23, 2024 10:35 GMT+1)

R Lamb
Director

The notes on pages 6 to 13 form part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2023

1. ACCOUNTING POLICIES

1.1 Basis of preparation of financial statements

The financial statements have been prepared in accordance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) - (Charities SORP (FRS 102)), the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Companies Act 2006.

JBA Trust Limited meets the definition of a public benefit entity under FRS 102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy.

The principal activity of the company is to enhance understanding and management of risks in the water environment by enabling research, education and training.

The company is a company limited by guarantee incorporated and domiciled in the United Kingdom.

These financial statements have been presented in Pound Sterling as this is the currency of the primary economic environment in which the company operates.

1.2 Company status

The company is a company limited by guarantee. The members of the company are the Trustees named on page 1. In the event of the company being wound up, the liability in respect of the guarantee is limited to £10 per member of the company.

1.3 Going concern

The financial statements have been prepared on the going concern basis. This is based on the continued financial support of its sponsors and creditors, which is confirmed at regular intervals, allied to the maintenance of a robust reserves policy.

1.4 Income

All income is recognised once the company has entitlement to the income, it is probable that the income will be received and the amount of income receivable can be measured reliably.

Donated services or facilities are recognised when the company has control over the item, any conditions associated with the donated item have been met, the receipt of economic benefit from the use of the company of the item is probable and that economic benefit can be measured reliably. In accordance with the Charities SORP (FRS 102), the general volunteer time of the Friends is not recognised and refer to the Trustees' report for more information about their contribution.

On receipt, donated professional services and donated facilities are recognised on the basis of the value of the gift to the company which is the amount the company would have been willing to pay to obtain services or facilities of equivalent economic benefit on the open market; a corresponding amount is then recognised in expenditure in the period of receipt.

Income tax recoverable in relation to donations received under Gift Aid or deeds of covenant is recognised at the time of the donation.

Income tax recoverable in relation to investment income is recognised at the time the investment income is receivable.

1. ACCOUNTING POLICIES (continued)

1.5 Expenditure

Expenditure is recognised once there is a legal or constructive obligation to transfer economic benefit to a third party, it is probable that a transfer of economic benefits will be required in settlement and the amount of the obligation can be measured reliably. Expenditure is classified by activity. The costs of each activity are made up of the total of direct costs and shared costs, including support costs involved in undertaking each activity. Direct costs attributable to a single activity are allocated directly to that activity. Shared costs which contribute to more than one activity and support costs which are not attributable to a single activity are apportioned between those activities on a basis consistent with the use of resources. Central staff costs are allocated on the basis of time spent, and depreciation charges allocated on the portion of the asset's use.

Support costs are those costs incurred directly in support of expenditure on the objects of the company and include project management carried out at Headquarters. Governance costs are those incurred in connection with administration of the company and compliance with constitutional and statutory requirements.

Charitable activities and Governance costs are costs incurred on the company's educational operations, including support costs and costs relating to the governance of the company apportioned to charitable activities.

Grants payable are charged in the year when the offer is made except in those cases where the offer is conditional, such grants being recognised as expenditure when the conditions attaching are fulfilled. Grants offered subject to conditions which have not been met at the year end are noted as a commitment, but not accrued as expenditure.

1.6 Tangible fixed assets and depreciation

A review for impairment of a fixed asset is carried out if events or changes in circumstances indicate that the carrying value of any fixed asset may not be recoverable. Shortfalls between the carrying value of fixed assets and their recoverable amounts are recognised as impairments. Impairment losses are recognised in the Statement of financial activities incorporating income and expenditure account.

Tangible fixed assets are carried at cost, net of depreciation and any provision for impairment. Depreciation is provided at rates calculated to write off the cost of fixed assets, less their estimated residual value, over their expected useful lives on the following bases:

Plant and machinery	-	25% straight line
Motor vehicles	-	25% straight line
Equipment	-	25% straight line

1.7 Interest receivable

Interest on funds held on deposit is included when receivable and the amount can be measured reliably by the company; this is normally upon notification of the interest paid or payable by the Bank.

1.8 Debtors

Trade and other debtors are recognised at the settlement amount after any trade discount offered. Prepayments are valued at the amount prepaid net of any trade discounts due.

1. ACCOUNTING POLICIES (continued)

1.9 Cash at Bank and in hand

Cash at bank and in hand includes cash and short term highly liquid investments with a short maturity of three months or less from the date of acquisition or opening of the deposit or similar account.

1.10 Liabilities and provisions

Liabilities are recognised when there is an obligation at the Balance sheet date as a result of a past event, it is probable that a transfer of economic benefit will be required in settlement, and the amount of the settlement can be estimated reliably. Liabilities are recognised at the amount that the company anticipates it will pay to settle the debt or the amount it has received as advanced payments for the goods or services it must provide. Provisions are measured at the best estimate of the amounts required to settle the obligation. Where the effect of the time value of money is material, the provision is based on the present value of those amounts, discounted at the pre-tax discount rate that reflects the risks specific to the liability. The unwinding of the discount is recognised within interest payable and similar charges.

1.11 Fund accounting

General funds are unrestricted funds which are available for use at the discretion of the Trustees in furtherance of the general objectives of the company and which have not been designated for other purposes.

2. INCOME FROM DONATIONS AND LEGACIES

	Unrestricted funds 2023 £	**Total funds 2023 £**	*Total funds 2022 £*
Donated services	**155,372**	**155,372**	148,352
Donations	**26,334**	**26,334**	31,648
Sales	**1,830**	**1,830**	789
Other income	**(31,279)**	**(31,279)**	-
Total donations and legacies	**152,257**	**152,257**	180,789
Total 2022	180,789	180,789	

Donated services are provided by the trading subsidiaries of JBA Group Limited and are valued at standard chargeable rates.

3. INVESTMENT INCOME

	Unrestricted funds 2023 £	Total funds 2023 £	*Total funds* 2022 £
Interest received	**3,685**	**3,685**	3,775
Total 2022	3,775	3,775	

4. ANALYSIS OF GRANTS

	Grants to Institutions 2023 £	Grants to Support Activities 2023 £	Total 2023 £	*Total* 2022 £
Grants, Activities undertaken	**21,200**	**111,698**	**132,898**	162,331
Total 2022	27,080	135,251	162,331	

	2023 £	2022 £
Grants to institutions	**21,200**	27,080
Research projects	**30,112**	32,806
Project pipeline development	**18,608**	19,732
Training projects	**62,795**	82,713
Seminars	**183**	-
Total	**132,898**	162,331

5. SUPPORT COSTS

	Activities undertaken £	Total 2023 £	Total 2022 £
Sub-Contractors associates	**49,800**	**49,800**	31,731
Sundry expenses	**(1,962)**	**(1,962)**	774
Communication and website	**17,133**	**17,133**	13,982
Computer consumables and software licences	**324**	**324**	1,149
Motor and travel expenses	**10,097**	**10,097**	3,306
Office costs	**25**	**25**	4,218
Insurance	**512**	**512**	470
Legal and professional	**124**	**124**	-
Depreciation	**4,479**	**4,479**	3,217
	80,532	**80,532**	58,847
Total 2022	58,847	58,847	

During the year ended 31 October 2023, the company incurred the following Governance costs:

£NIL (2022 - £*NIL*) included within the table above in respect of Activities undertaken directly.

£NIL (2022 - £*NIL*) included within the table above in respect of Support costs.

6. GOVERNANCE COSTS

	Unrestricted funds 2023 £	Total funds 2023 £	*Total funds* 2022 £
Accountancy fees	**3,410**	**3,410**	2,244
Bank charges	**374**	**374**	42
	3,784	**3,784**	2,286

7. NET INCOME/(EXPENDITURE)

This is stated after charging:

	2023 £	2022 £
Depreciation of tangible fixed assets:		
- owned by the charity	**4,479**	3,217

During the year, no Trustees received any remuneration (2022 - £NIL).
During the year, no Trustees received any benefits in kind (2022 - £NIL).
During the year, no Trustees received any reimbursement of expenses (2022 - £NIL).

8. EMPLOYEES

The company has no employees other than the Trustees, in both the current and previous year.

9. TANGIBLE FIXED ASSETS

	Plant and machinery £	Motor vehicles £	Equipment £	Total £
Cost				
At 1 November 2022	**37,189**	**20,100**	**1,607**	**58,896**
Additions	**11,418**	**-**	**-**	**11,418**
At 31 October 2023	**48,607**	**20,100**	**1,607**	**70,314**
Depreciation				
At 1 November 2022	**35,065**	**20,100**	**1,607**	**56,772**
Charge for the year	**4,479**	**-**	**-**	**4,479**
At 31 October 2023	**39,544**	**20,100**	**1,607**	**61,251**
Net book value				
At 31 October 2023	**9,063**	**-**	**-**	**9,063**
At 31 October 2022	2,124	-	-	2,124

10. DEBTORS

	2023 £	2022 £
Other debtors	**-**	1,000
Prepayments and accrued income	**-**	28,800
	-	29,800

11. CREDITORS: Amounts falling due within one year

	2023 £	2022 £
Trade creditors	**8,691**	3,896
Other creditors	**566**	18,342
Accruals and deferred income	**2,150**	1,868
	11,407	24,106

12. STATEMENT OF FUNDS

STATEMENT OF FUNDS - CURRENT YEAR

	Balance at 1 November 2022 £	Income £	Expenditure £	Balance at 31 October 2023 £
Unrestricted funds				
General Funds	**238,904**	**158,421**	**(217,344)**	**179,981**
Other General funds	**-**	**(2,479)**	**130**	**(2,349)**
	238,904	**155,942**	**(217,214)**	**177,632**

STATEMENT OF FUNDS - PRIOR YEAR

	Balance at 1 November 2021 £	*Income* £	*Expenditure* £	*Balance at 31 October 2022* £
General Funds	277,804	184,564	(223,464)	238,904
Total of funds	277,804	184,564	(223,464)	238,904

13. ANALYSIS OF NET ASSETS BETWEEN FUNDS

ANALYSIS OF NET ASSETS BETWEEN FUNDS - CURRENT YEAR

	Unrestricted funds 2023 £	Total funds 2023 £
Tangible fixed assets	**9,063**	**9,063**
Current assets	**179,976**	**179,976**
Creditors due within one year	**(11,407)**	**(11,407)**
	177,632	**177,632**

ANALYSIS OF NET ASSETS BETWEEN FUNDS - PRIOR YEAR

	Unrestricted funds 2022 £	*Total funds* 2022 £
Tangible fixed assets	2,124	2,124
Current assets	265,534	265,534
Creditors due within one year	(28,754)	(28,755)
	238,904	238,903

14. RELATED PARTY TRANSACTIONS

Included within debtors, amounts falling due within one year is an amount of £Nil (2022 - £19,685) due from JBA Risk Management Limited. During the year, donations were received from JBA Risk Management Limited of £26,334 (2022 - £31,648).

During the year, donated services were received from Jeremy Benn Associates Limited of £153,666 (2022 - £148,352).

Both JBA Risk Management Limited and Jeremy Benn Associates Limited are under common control by virtue of the shareholdings and trusteeship of J R Benn.

JBA Trust Limited - Documentation for signing 2023-10-31

Final Audit Report 2024-05-23

Created:	2024-05-02
By:	Natalie Bunney (natalie.bunney@armstrongwatson.co.uk)
Status:	Signed
Transaction ID:	CBJCHBCAABAALPci_eZPhHPedXBmnMcE3RKt4AI_2v5V

"JBA Trust Limited - Documentation for signing 2023-10-31" History

Document created by Natalie Bunney (natalie.bunney@armstrongwatson.co.uk)
2024-05-02 - 07:58:55 GMT- IP address: 85.118.13.137

Document emailed to rob.lamb@jbatrust.org for signature
2024-05-02 - 08:03:56 GMT

Email viewed by rob.lamb@jbatrust.org
2024-05-02 - 09:40:28 GMT- IP address: 80.194.116.67

New document URL requested by louise.perry@jbagroup.co.uk
2024-05-16 - 13:01:49 GMT- IP address: 80.194.116.67

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2024-05-23 - 08:57:17 GMT- IP address: 80.194.116.67

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2024-05-23 - 08:57:32 GMT- IP address: 80.194.116.67

Signer rob.lamb@jbatrust.org entered name at signing as Rob Lamb
2024-05-23 - 09:35:34 GMT- IP address: 80.194.116.67

Document e-signed by Rob Lamb (rob.lamb@jbatrust.org)
Signature Date: 2024-05-23 - 09:35:36 GMT - Time Source: server- IP address: 80.194.116.67

Document emailed to Rohan Day (rohan.day@armstrongwatson.co.uk) for signature
2024-05-23 - 09:35:38 GMT

Email viewed by Rohan Day (rohan.day@armstrongwatson.co.uk)
2024-05-23 - 09:38:11 GMT- IP address: 110.239.210.113

Signer Rohan Day (rohan.day@armstrongwatson.co.uk) entered name at signing as Armstrong Watson Audit Limited

2024-05-23 - 09:39:49 GMT- IP address: 85.118.13.137

Document e-signed by Armstrong Watson Audit Limited (rohan.day@armstrongwatson.co.uk)

Signature Date: 2024-05-23 - 09:39:51 GMT - Time Source: server- IP address: 85.118.13.137

Agreement completed.

2024-05-23 - 09:39:51 GMT

JBA TRUST LIMITED

England & Wales - Charity number 1150278

Accounts

Company Registration Number

07840801
Charity number: 1150278

JBA TRUST LIMITED

UNAUDITED
FINANCIAL STATEMENTS

31 OCTOBER 2022

(A company limited by guarantee)

ArmstrongWatson®
Accountants, Business & Financial Advisers

JBA TRUST LIMITED

(A company limited by guarantee)

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JBA TRUST LIMITED

(A company limited by guarantee)

REFERENCE AND ADMINISTRATIVE DETAILS OF THE COMPANY, ITS TRUSTEES AND ADVISERS FOR THE YEAR ENDED 31 OCTOBER 2022

Trustees

Rob Lamb, JBA (Managing Director)
Jeremy Benn, JBA
Jim Hall, Oxford University
Keith Beven, Lancaster University
Nick Russell, Independent Financial Consultant

Company registered number

07840801

Charity registered number

1150278

Registered office

1 Broughton Park, Old Lane North, Broughton, Skipton, North Yorkshire, BD23 3FD

Company secretary

C Robson

Independent examiners

Armstrong Watson Audit Limited, Number 3, Acorn Business Park, Airedale Business Centre, Skipton, North Yorkshire, BD23 2UE

JBA TRUST LIMITED

(A company limited by guarantee)

TRUSTEES' REPORT
FOR THE YEAR ENDED 31 OCTOBER 2022

The Trustees present their annual report together with the financial statements of the company for the 1 November 2021 to 31 October 2022. The Trustees confirm that the Annual Report and financial statements of the company comply with the current statutory requirements, the requirements of the company's governing document and the provisions of the Statement of Recommended Practice (SORP), applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) as amended by Update Bulletin 1 (effective 1 January 2015).

GOING CONCERN

The financial statements have been prepared on the going concern basis. This is based on the continued financial support of its sponsors and creditors, which is confirmed at regular intervals, allied to the maintenance of a robust reserves policy.

TRUSTEES' RESPONSIBILITIES STATEMENT

The Trustees (who are also directors of JBA Trust Limited for the purposes of company law) are responsible for preparing the Trustees' report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

Company law requires the Trustees to prepare financial statements for each financial year. Under company law the Trustees must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the charitable company and of the incoming resources and application of resources, including the income and expenditure, of the charitable company for that period. In preparing these financial statements, the Trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP;
- make judgments and accounting estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue in operation.

The Trustees are responsible for keeping adequate accounting records that are sufficient to show and explain the charitable company's transactions and disclose with reasonable accuracy at any time the financial position of the charitable company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

This report was approved by the Trustees, on and signed on their behalf by:

Rob Lamb, Managing Director of JBA Trust

24 April 2023

Director's Report

This year we entered our second decade, and, with the easing of Covid-19 restrictions in the UK, we took the opportunity to celebrate our first 10 years with some of our project partners. Over our first decade, we have helped 127 students with funding for postgraduate training and research, supported over 300 engagement events and worked with 22 universities and nine NGOs. Our digital resources have been viewed more than 35 million times by people around the world.

We have always emphasised the sharing of knowledge as our core mission. Sharing encompasses the creation and applications of knowledge by people and organisations, as well as its communication.

We look to bring quality to each of the steps in this knowledge-sharing process. Our support has helped to deliver 39 peer-reviewed scientific publications and numerous presentations at technical scientific and industry conferences. We have worked with partners to encourage STEM learning and help young people to see opportunities for careers that will ultimately help to make our society more resilient and sustainable.

The trustees recognise that the sectors we work in, environmental sciences, environmental non-profit and engineering, are often not fully representative of the society we live in. We have begun to focus more attention on these issues of representation and equity. At the same time, our work is evolving to include resilience and sustainability as core concepts.

We are a corporate foundation, and most of our resources are donated by our sponsors, the JBA Group of companies. I have always believed that our most important contributions to public benefit come from the people across JBA who support us. Over our first 10 years, we have facilitated more than 33,000 hours of work by JBA colleagues to help share their knowledge and expertise, for which I and the trustees are, as ever, most grateful. We also thank the many partners we work with collaboratively, helping us to deliver on our charitable objectives.

Rob Lamb, Managing Director





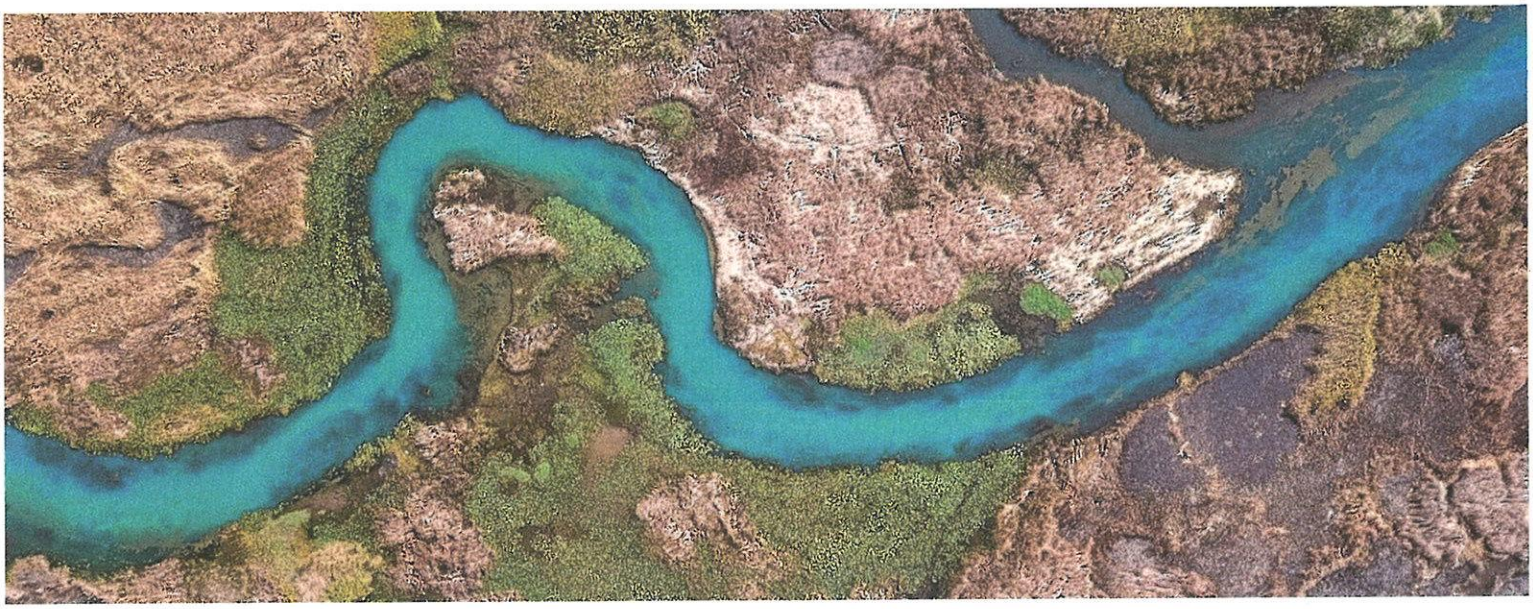
Our purpose and activities

JBA Trust is a charity established and funded by the JBA Group of companies. We aim to help improve resilience to environmental risks by sharing knowledge. We do this by enabling research, education and engagement.

We work with academic researchers, NGOs, charities and the JBA Group of companies in four key areas:

- Facilitating collaboration between academia and industry to deliver high quality scientific research.
- Publishing and disseminating knowledge, enabling shared understanding and good practice.
- Supporting post-graduate training by providing technical expertise and financial bursaries for MSc and PhD studentships.
- Engaging with schools, charities and voluntary groups to share inspiration and learning resources.

This annual report reviews the activities of the JBA Trust over the past year and how our work has delivered public benefit.



Science and research

We aim to facilitate collaboration between academia and industry to deliver scientific research that improves society's understanding and management of risks in the water environment. By publishing and disseminating the resulting research outputs, we enable knowledge exchange and share best practice.

Collaborative research

In 2021-22 we worked with universities, research institutions, public sector and charitable organisations. The highlights and outputs of our collaborative research projects are summarised below.

UK Flood Hydrology Roadmap

The flood hydrology roadmap is a 25-year vision and plan to advance all aspects of flood hydrology in the United Kingdom. It has been developed with inputs from more than 270 individuals from 50 organisations working in hydrology, flood management and related topics.

We have supported the roadmap project since it started in 2018 through membership of its steering group and by contributing to publications and presentations.

This year we co-authored a paper about the roadmap, **"The future of flood hydrology in the UK"**, which was published in the journal Hydrology Research. In September 2022, we also presented at the Global Flood Partnership meeting in Leeds and the British Hydrological Society symposium in Lancaster.

Research outputs	Type	Link
Flood hydrology roadmap	Project summary and documents	https://www.gov.uk/flood-and-coastal-erosion-risk-management-research-reports/flood- hydrology-roadmap
The future of flood hydrology in the UK	Journal Paper	https://doi.org/10.2166/nh.2022.053

Natural Flood Management manual

CIRIA's natural flood management manual (C802) was launched in May 2022. We provided sponsorship and technical support throughout the project.

The manual covers the delivery of natural flood management (NFM) from problem identification through conception, funding, design, construction, inspection, maintenance, adaptive management to end-of-life considerations. It aims to provide confidence in NFM delivery, recognising that innovation in this area is constantly emerging.

Research outputs	Type	Link
Natural flood management manual	Guidance report	https://www.ciria.org/ItemDetail?iProductCode=C802F&Category=FREEPUBS

Yorkshire iCASP

iCASP is a 5-year programme that aims to build on Natural Environment Research Council (NERC) -funded science in climate change, flooding, integrated catchment management, carbon storage in soils, water quality and water resources to generate economic, societal and environmental benefits in rural and urban areas of Yorkshire. It is led by the Universities of Leeds, Sheffield and York, and the National Centre for Atmospheric Science. JBA Trust are a 'springboard' partner on the governance panel, along with industry, NGOs and government.

This year, Water@Leeds and iCASP commissioned a scoping study to explore the potential for a 'Broughton Hall Research Hub' to enable and deliver research, knowledge exchange and education. The Broughton Hall Estate covers approximately 3,000 acres of land including moorland, parkland, improved meadow pastures, woodland and floodplain, and is undergoing a transformative rewilding programme on one-third of the land. We are helping identify research, education and engagement opportunities.



Tree planting in progress on the Broughton Estate (Credit: Duncan Faulkner)

NERC Natural Flood Management research programme

This four-year £4 million programme has investigated the suitability and effectiveness of working with natural processes to reduce flood risk in different environments around England. Funded by NERC, it has three projects each with a different focus: LANDWISE (land use and soil management), Protect NFM (upland headwater restoration), and Q-NFM (quantifying effectiveness of NFM for mitigating flood risk).

We have supported the Q-NFM and LANDWISE projects by participating in research activities and in an advisory capacity, and this year made contributions to a paper published in the journal Hydrological Processes.

Research outputs	Type	Link
Using micro-catchment experiments for multi-local scale modelling of nature-based solutions	Journal paper	https://doi.org/10.1002/hyp.14418

Doctoral research projects

Our collaboration with universities across the UK enables us to support graduate researchers (research students) working on doctoral projects to develop advanced skills and deliver high quality research that helps enhance the understanding of a wide range of risks in the environment.

We support doctoral researchers through a variety of programmes including doctoral training centres funded by UK Research and Innovation (UKRI).

This year, we were delighted to see another two graduate researchers, Zora van Leeuwen and Jake Grainger, successfully complete their PhDs. We also welcomed three new PhD students to our programme to undertake research on a broad range of topics that will help improve our understanding and mitigation of environmental risks:

- **Tharindu Manamperi**, studying at Swansea University, is investigating how artificial intelligence (AI) platforms can predict the evolution of coastal erosion.
- **Adam Wood**, studying at the University of the West of England, is researching social justice in local flood resilience.
- **Ben Bluck**, studying at the University of Southampton, is investigating the impact of artificial light on fish passage through culverts.

More information about all our PhD projects can be found at:
https://www.jbatrust.org/who-we-help/phd-students/

PhD project outputs

We are pleased to be able to share outputs of the projects, including peer reviewed publications.

- Helen Hooker, studying at Reading University, published her first paper in the Journal of Hydrology on 'Analysis of 2D inundation patterns to identify skilful scales of comparison'. The paper is openly available at: https://doi.org/10.1016/j.jhydrol.2022.128170
- Luke Jenkins, studying at the University of Southampton, published his first paper in Natural Hazards on 'The temporal clustering of storm surge, wave height, and high sea level exceedances around the UK coastline'. The paper is openly available at: https://link.springer.com/article/10.1007/s11069-022-05617-z



Research publication summary

During the year, we supported and co-authored studies published as papers in peer-reviewed scientific journals. The peer review process can be lengthy, and so some of these papers report on research activity carried out in previous years.

Title and link	Journal	Authors	Status
Invited perspectives: Challenges and future directions in improving bridge flood resilience	Natural Hazards and Earth System Sciences	Tubaldi, E et al + JBA Trust co-author	Published
Prediction of flood quantiles at ungauged catchments for the contiguous USA using Artificial Neural Networks	Hydrology Research	Filipova, V. et al + JBA Trust co-author	Published
Using micro-catchment experiments for multi-local scale modelling of nature-based solutions	Hydrological Processes	Hankin, B et al + JBA Trust co-author	Published
Spatial scale evaluation of forecast flood inundation maps	Journal of Hydrology	Hooker, H. et al.	Published
The temporal clustering of storm surge, wave height, and high sea level exceedances around the UK coastline	Natural Hazards	Jenkins, L.J., Haigh, I.D., Camus, P. et al. + JBA Trust co-author	Published
Geomorphic effects of natural flood management woody dams in upland streams	River Research and Applications	Lo, H. W., van Leeuwen, Z., Klaar, M., Woulds, C., & Smith, M.	Published
The future of flood hydrology in the UK	Hydrology Research	Lamb, R. et al	Published



Support for students in higher education

There are many academic subjects that generate the knowledge and understanding needed to manage risks in our environment. Whilst undergraduate courses such as Geography and Environmental or Physical Sciences are important, the relevant specialist training often comes into greater focus at postgraduate (masters or doctoral) level. We therefore emphasise support for students and projects at this level.

The British Hydrological Society, JBA Trust and Environment Agency Studentship Awards

In 2021-22 we continued our partnership established in 2011 with the British Hydrological Society (BHS) and the Environment Agency to support students working towards MSc (or equivalent level) qualifications in hydrology, water resources, catchment management and other related subjects.

This year we increased the value of the awards given the significant increase in the cost of living for postgraduate students. Ten bursaries of £2,500 were awarded and we have now supported 97 students since 2011.

Applications for these bursaries were managed using the web-based system that we developed in 2014 and have maintained since. This continued to work well and enabled us to coordinate the assessment process with the BHS and Environment Agency effectively.

This year we collected information on equality, diversity and inclusion (EDI) as part of the application process for the first time. The aim is to build an understanding of the diversity of recipients, alongside the partners' ambitions to ensure that the awards are inclusive.

Flood and Coastal Risk Management Scholarships

The challenges of more frequent extreme weather and new flood risk responsibilities mean that there is a growing need for skilled water and environmental risk management professionals. This year we continued to provide support through our scholarships to fully fund the tuition fees for Lancaster University's Flood and Coastal Risk Management Postgraduate Certificate course.

We awarded scholarships to Tomas Jonathan, a Flood Risk Analysis Advisor at Natural Resources Wales, and Liam Hall, a Project Manager at Rivers Ecology (part of Norfolk Rivers Trust).

> **"The PGCert offers me the chance to study with and learn from experts in coastal and flood risk management about the key technical and professional aspects of becoming a good flood modeller.**
>
> **The topics covered in the course are directly related to my current role and I strongly believe the support from JBA Trust will not only benefit my understanding and knowledge, but that of my co-workers and the service we provide to the public."**
>
> - Tomas Jonathan, 2022 PGCert Scholarship recipient

Masters projects

We helped to provide MSc (or equivalent degree level) students with placements, technical expertise and access to software resources and case study data, as well as offering a platform for them to share highlights from their research projects. The students we help have gained insight into how methodologies and techniques are applied in industry and have an opportunity to see how they will be able to use their skills in a future career.

In 2021-22, we helped seven students from the Universities of Leeds, Birmingham and Lancaster. The students worked with support from our colleagues in the JBA Group of companies on a range of topics including modelling hydrological impacts of beaver reintroduction, measuring community resilience to climate change and flood forecasting.



Learning and engagement

We support a wide range of activities aimed at encouraging students at schools and universities to develop or enhance their interests in water and environmental management, which could also ultimately lead them to pursue careers in the field. Our learning and engagement activities also extend to the wider community, and to flood risk management professionals.

Physical models

Our physical models of catchments, rivers and coasts enable us to bring to life topics including flood risk, coastal and river engineering and nature-based solutions. Our collection includes four different sized hydraulic river flumes, four wave tanks, an AR (Augmented Reality) sandbox and a PARM (Projection Augmented Relief Model).

This year saw a big increase in demand from primary and secondary schools for engaging and interactive demonstrations using the physical models to support STEM (Science, Technology, Engineering and Maths) teaching and enrichment activities, including sessions as part of British Science Week. During 2021-22, the models supported a wide range of STEM engagement, including an Interactive Geography Day for 120 secondary school students focusing on flood risk management; and flood risk and water safety sessions with five primary schools.

Partnerships and learning resources

Our digital learning resources have elements of engineering, maths and geography included in each topic in the context of flood risk, water management, weather and climate. They are packaged by age group and include videos, worksheet activities, case studies and exercises.

All our learning resources can be accessed and downloaded at:
www.jbatrust.org/how-we-help/learning-resources/.

In 2021-22, we worked with the following organisations to develop new learning resources and STEM initiatives to support engagement and education.

North Yorkshire Fire and Rescue Service (NYF&RS) - Water safety flume

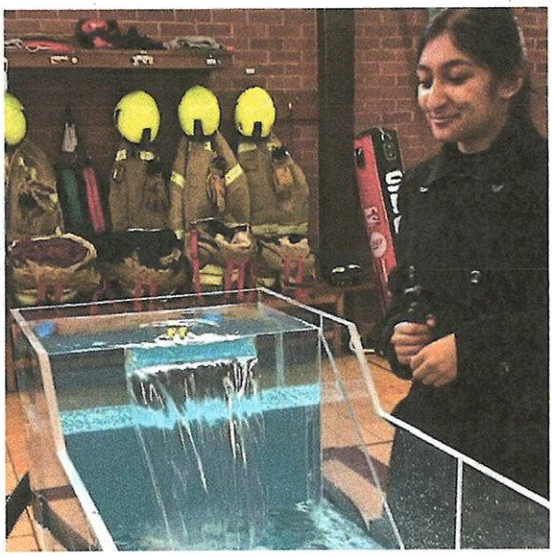
We partnered with NYF&RS and Hydrotec to build a new model specifically focused on water safety around river features and engineered structures, for example strainers (culvert screens, debris), weirs and waterfalls.

The flume is supporting the work of the Safety and Prevention Officers (SPOs) who regularly visit schools and communities to raise awareness of the risks associated with swimming in rivers, canals and reservoirs. The SPOs have already delivered demonstrations to hundreds of people at schools, National Park visitor centres and county shows.

We also co-created a new educational water safety video featuring the flume, available at:

https://www.jbatrust.org/how-we-help/physical-models/water-safety-demonstration-flume/





Handing over the water safety flume (left) and testing the waterfall feature (right).

Institution of Civil Engineers (ICE) – CityZen competition

This year we worked with the ICE's Engagement and Inspiration Team to support a competition for 16-18 year-olds that focused on developing the infrastructure for a town within the context of climate change, flood risk and sustainability.

In 2021-22 over 300 schools took part in the competition 'CityZen' which was hosted within a specially designed gaming platform. We sponsored the First Prize (provision of a wave tank, training session and learning resources for the winning school) and contributed to the judging panel.

The winning entry can be seen at: ICE CityZen Award | Institution of Civil Engineers (ICE).

Lancaster University and the British Ecological Society – Nature-based Solutions

This year we worked with Lancaster University and the British Ecological Society to develop a new physical model that can show the impact of nature-based solutions (NBS) on flood risk, for example bunds, leaky barriers, roughness and moorland restoration. The model is designed to be interactive, off-grid and lightweight.

The prototype was trialled at the Glastonbury festival in June 2022 in the Science Tent area. We identified a range of improvements we can make to the model design and accompanying learning resources for next year.

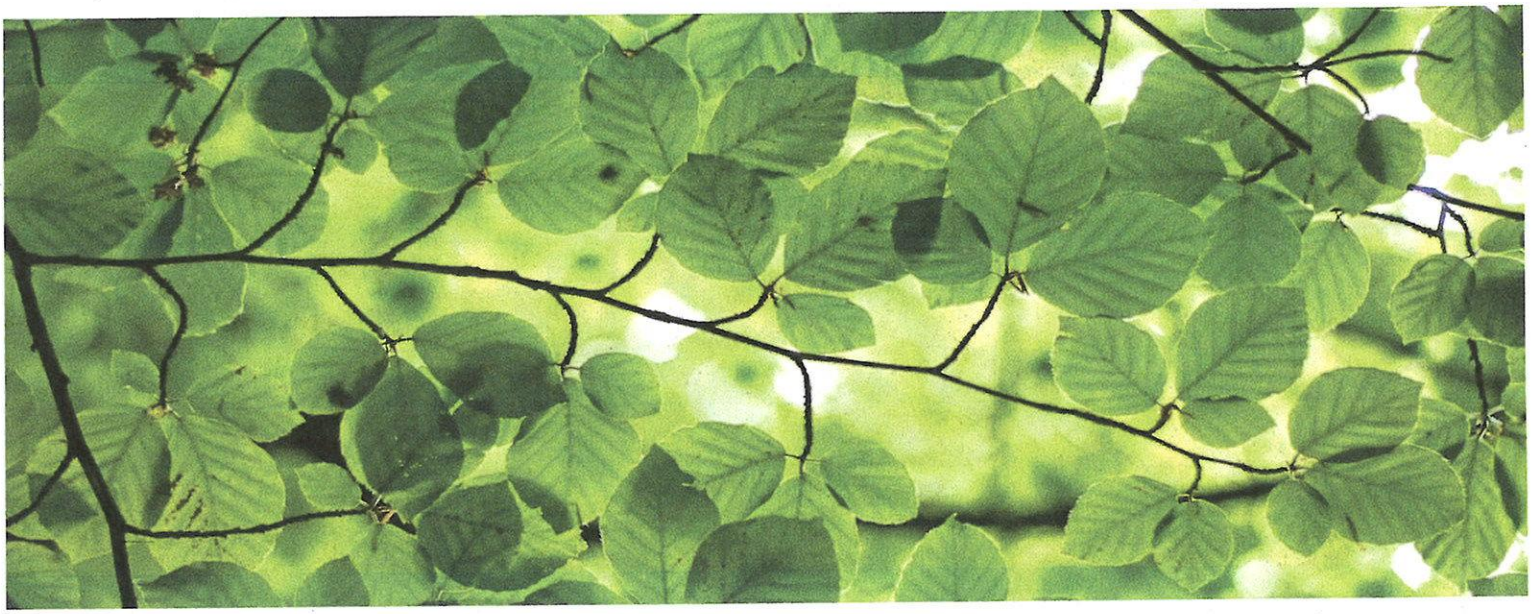


The new Lego NBS model in action at Glastonbury (left) and the AR Sandbox at the Manchester Science Festival (right).

Public engagement

We have supported four high profile Science Festival events with our partners. At each event, our volunteers were able to talk to diverse communities and have many interesting conversations about flood risk, climate change and resilience:

- London Science Museum with the Environment Agency supporting the 'Science on a Sphere' exhibition.
- Manchester Science Festival with the Environment Agency supporting an exhibition focused on climate change and community resilience.
- Glastonbury Festival in the Science Futures tent with Lancaster University and the British Ecological Society supporting an interactive display on nature-based solutions.
- Cheltenham Science Festival supporting UKCEH's activities at the festival.



Building our reach and enabling knowledge exchange

Overview of digital engagement

Our website (www.jbatrust.org) enables people to easily access all our publications and educational resources, as well as find information about JBA Trust and our research projects. It continues to help us deliver our charitable objectives of sharing best practice and supporting engagement and education.

In 2021-22 we received 115 direct enquiries about research support, our physical models, bursaries and scholarships and support for educational activities and events.

We use Twitter to publicise research outputs, new resources, publications or scholarships and awards. The number of **@JBATrust** followers is steadily growing and by the end of 2021-22 we had 1,085 followers.

JBA Trust's YouTube channel hosts all our video resources and we now have over 54,000 subscribers. Across social media platforms, our videos have received over 35 million views.

Global reach

This year we responded to over 94 requests from around the world for support and assistance from people who, having seen our physical model and weather station resources, would like to build their own or set up their own educational project. The contacts came through social media or our website contact pages.

By sharing factsheets and detailed specifications for our models, we aim to enable people to create their own educational resources to support their communities and raise awareness of flood risk management. In some cases, we have established an on-going dialogue with people who have approached us to help them with their own projects. We have helped high school and college students, university researchers, teachers and private individuals.



Reflection on our first 10 years and future plans

In September 2022, we hosted two events and invited attendees to help us to shape our plans for research, engagement and education. Each event had a different focus:

Research partnerships and future priorities – this was a virtual event where we shared some highlights of our collaborative research and held a workshop session to help prioritise our future research activities.

Science translation, education and engagement – this was an in-person event where partners could explore the learning resources we have developed to support flood risk education and engagement, and see all our physical models in action.

We are using the feedback from the workshops to help us review our research themes and continue to develop our engagement resources. We are already supporting research on some of the topics raised, including on applications of machine learning alongside process models, and on social justice in flood risk management. We also aim to prioritise events with wider reach, like science fairs, and find partnerships to connect with new groups.



Summary of feedback from the workshop events



Structure, governance and management

JBA Trust is a company limited by guarantee and is governed by its Memorandum and Articles of Association. It was incorporated on 9 November 2011.

Directors and trustees

The Trustees serving during the year were as follows:

Trustees	Rob Lamb, JBA	(Managing Director of JBA Trust)
	Jeremy Benn, JBA	
	Jim Hall, Oxford University	
	Keith Beven, Lancaster University	
	Nick Russell, Independent financial consultant	
Secretary	Craig Robson	

Governance

The trustees review the activities of JBA Trust every six months to ensure that they are focused on supporting the purpose of the charity. The review also considers the strategic direction of the charity and considers how planned activities will contribute to public benefit.

We have referred to the guidance contained in the Charity Commission's general guidance on public benefit when reviewing our aims and objectives and in planning our future activities.

Appointment of trustees

On incorporation of the JBA Trust, the Board of Trustees was appointed by invitation.

To preserve independence of the JBA Trust from JBA Group companies, which provide part of its core funding, the JBA Trust's Articles of Association stipulate that the number of trustees

connected to or employed by JBA Group shall always be less than half of the total number of trustees appointed at any given time.

The trustees are not remunerated (other than payment to cover travel and accommodation costs where required for JBA Trust business).

Trustee induction and training

Periodically, the trustees meet and are briefed on their legal obligations under charity and company law, updates to the Charity Commission's guidance on public benefit, the content of the Memorandum and Articles of Association and the JBA Trust business plan.

Organisation

The Board of Trustees meets every six months and is responsible for the strategic direction and policy of the charity. A Managing Director is appointed by the trustees to manage the day-to day operations of the charity and is supported by a Programme Manager.

Risk management

The trustees have a risk management strategy which comprises:

- An annual review of the risks the charity may face
- Policies and procedures in place to mitigate those risks
- Plans in place to minimise the impact of the risks should they materialise.

The principal risk to JBA Trust is financial sustainability. This is mitigated by having a robust reserves policy and a clear financial plan which is reviewed and subsequently approved by the trustees at the start of the financial year.

JBA Trust adopts policies and procedures from our host, the JBA Group, which are externally validated where applicable. These include policies on: Health and Safety; Energy Use; Environment; Sustainability; Social Responsibility; Equality and Diversity.

Financial review

The principal funding source for JBA Trust is JBA Group dividends. JBA Trust also aims to leverage funding for research projects by supporting partners in applying for funding from external organisations, for example UK Research and Innovation (UKRI) grants awarded to university partners for PhD studentships. We also generate a small amount of additional income from hiring out our physical models for use by commercial organisations. Personal donations are processed through an online giving platform that enables Gift Aid to be claimed efficiently.

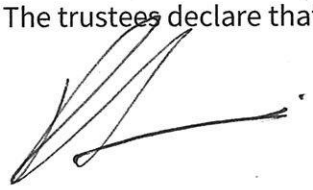
Reserves Policy

Reserves are required to minimise the financial risks associated with the unlikely event of unplanned or unforeseen expenditure. The JBA Trust maintains sufficient reserves to cover all contractually committed expenditure or liabilities and operating costs for one year.

Plan for future periods

JBA Trust anticipates continued long-term funding from JBA Group. To ensure that the charity maximises the value of its income in carrying out its activities, the strategic plan focuses on continuing to seek match funding for research projects from funding bodies, including Universities and Research Councils. In the future JBA Trust may also wish to generate an income by licensing datasets, results or models generated by research.

The trustees declare that they have approved the Trustees Report above.



On behalf of the trustees

Rob Lamb, Managing Director of JBA Trust

JBA TRUST LIMITED

(A company limited by guarantee)

INDEPENDENT EXAMINER'S REPORT
FOR THE YEAR ENDED 31 OCTOBER 2022

INDEPENDENT EXAMINER'S REPORT TO THE TRUSTEES OF JBA TRUST LIMITED (the 'company')

I report to the charity Trustees on my examination of the accounts of the company for the year ended 31 October 2022.

This report is made solely to the company's Trustees, as a body, in accordance with Part 4 of the Charities (Accounts and Reports) Regulations 2008. My work has been undertaken so that I might state to the company's Trustees those matters I am required to state to them in an Independent examiner's report and for no other purpose. To the fullest extent permitted by law, I do not accept or assume responsibility to anyone other than the company and the company's Trustees as a body, for my work or for this report.

RESPONSIBILITIES AND BASIS OF REPORT

As the Trustees of the company (and its directors for the purposes of company law) you are responsible for the preparation of the accounts in accordance with the requirements of the Companies Act 2006 ('the 2006 Act').

Having satisfied myself that the accounts of the company are not required to be audited under Part 16 of the 2006 Act and are eligible for independent examination, I report in respect of my examination of the company's accounts carried out under section 145 of the Charities Act 2011 ('the 2011 Act'). In carrying out my examination I have followed the Directions given by the Charity Commission under section 145(5)(b) of the 2011 Act.

INDEPENDENT EXAMINER'S STATEMENT

I have completed my examination. I can confirm that no matters have come to my attention in connection with the examination giving me cause to believe:

1. accounting records were not kept in respect of the company as required by section 386 of the 2006 Act; or

2. the accounts do not accord with those records; or

3. the accounts do not comply with the accounting requirements of section 396 of the 2006 Act other than any requirement that the accounts give a 'true and fair' view which is not a matter considered as part of an independent examination; or

4. the accounts have not been prepared in accordance with the methods and principles of the Statement of Recommended Practice for accounting and reporting by charities [applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102).

I have no concerns and have come across no other matters in connection with the examination to which attention should be drawn in this report in order to enable a proper understanding of the accounts to be reached.

Armstrong Watson Audit Limited.

Signed: Dated: 24 April 2023

Rohan Day FCA

Armstrong Watson Audit Limited
Number 3
Acorn Business Park
Airedale Business Centre
Skipton
North Yorkshire
BD23 2UE

JBA TRUST LIMITED

(A company limited by guarantee)

STATEMENT OF FINANCIAL ACTIVITIES INCORPORATING INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 OCTOBER 2022

	Note	Unrestricted funds 2022 £	Total funds 2022 £	*Total funds* 2021 £
INCOME FROM:				
Donations and legacies	2	**180,789**	**180,789**	209,923
Investments	3	**3,775**	**3,775**	3,053
TOTAL INCOME		**184,564**	**184,564**	212,976
EXPENDITURE ON:				
Charitable activities	4,6,5	**223,464**	**223,464**	234,466
TOTAL EXPENDITURE		**223,464**	**223,464**	234,466
NET EXPENDITURE BEFORE OTHER RECOGNISED GAINS AND LOSSES		**(38,900)**	**(38,900)**	(21,490)
NET MOVEMENT IN FUNDS		**(38,900)**	**(38,900)**	(21,490)
RECONCILIATION OF FUNDS:				
Total funds brought forward		**277,804**	**277,804**	299,294
TOTAL FUNDS CARRIED FORWARD		**238,904**	**238,904**	277,804

The notes on pages 6 to 13 form part of these financial statements.

JBA TRUST LIMITED

(A company limited by guarantee)
REGISTERED NUMBER: 07840801

BALANCE SHEET
AS AT 31 OCTOBER 2022

	Note	£	2022 £	£	2021 £
FIXED ASSETS					
Tangible assets	9		**2,124**		5,341
CURRENT ASSETS					
Debtors	10	**29,800**		38,822	
Cash at bank and in hand		**231,086**		257,277	
		260,886		296,099	
CREDITORS: amounts falling due within one year	11	**(24,106)**		(23,636)	
NET CURRENT ASSETS			**236,780**		272,463
NET ASSETS			**238,904**		277,804
CHARITY FUNDS					
Unrestricted funds	12		**238,904**		277,804
TOTAL FUNDS			**238,904**		277,804

The company's financial statements have been prepared in accordance with the provisions applicable to companies subject to the small companies regime.

The Trustees consider that the company is entitled to exemption from the requirement to have an audit under the provisions of section 477 of the Companies Act 2006 ("the Act") and members have not required the company to obtain an audit for the year in question in accordance with section 476 of the Act.

The Trustees acknowledge their responsibilities for complying with the requirements of the Companies Act 2006 with respect to accounting records and the preparation of financial statements.

The financial statements have been prepared in accordance with the provisions applicable to companies subject to the small companies regime and in accordance with the provisions of FRS 102 Section 1A - small entities.

The financial statements were approved and authorised for issue by the Trustees on 24/04/23 and signed on their behalf, by:

R Lamb
Director

The notes on pages 6 to 13 form part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2022

1. ACCOUNTING POLICIES

1.1 Basis of preparation of financial statements

The financial statements have been prepared in accordance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) - (Charities SORP (FRS 102)), the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Companies Act 2006.

JBA Trust Limited meets the definition of a public benefit entity under FRS 102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy.

The principal activity of the company is to enhance understanding and management of risks in the water environment by enabling research, education and training.

The company is a company limited by guarantee incorporated and domiciled in the United Kingdom.

These financial statements have been presented in Pound Sterling as this is the currency of the primary economic environment in which the company operates.

1.2 Company status

The company is a company limited by guarantee. The members of the company are the Trustees named on page 1. In the event of the company being wound up, the liability in respect of the guarantee is limited to £10 per member of the company.

1.3 Going concern

The financial statements have been prepared on the going concern basis. This is based on the continued financial support of its sponsors and creditors, which is confirmed at regular intervals, allied to the maintenance of a robust reserves policy.

1.4 Income

All income is recognised once the company has entitlement to the income, it is probable that the income will be received and the amount of income receivable can be measured reliably.

Donated services or facilities are recognised when the company has control over the item, any conditions associated with the donated item have been met, the receipt of economic benefit from the use of the company of the item is probable and that economic benefit can be measured reliably. In accordance with the Charities SORP (FRS 102), the general volunteer time of the Friends is not recognised and refer to the Trustees' report for more information about their contribution.

On receipt, donated professional services and donated facilities are recognised on the basis of the value of the gift to the company which is the amount the company would have been willing to pay to obtain services or facilities of equivalent economic benefit on the open market; a corresponding amount is then recognised in expenditure in the period of receipt.

Income tax recoverable in relation to donations received under Gift Aid or deeds of covenant is recognised at the time of the donation.

Income tax recoverable in relation to investment income is recognised at the time the investment income is receivable.

1. ACCOUNTING POLICIES (continued)

1.5 Expenditure

Expenditure is recognised once there is a legal or constructive obligation to transfer economic benefit to a third party, it is probable that a transfer of economic benefits will be required in settlement and the amount of the obligation can be measured reliably. Expenditure is classified by activity. The costs of each activity are made up of the total of direct costs and shared costs, including support costs involved in undertaking each activity. Direct costs attributable to a single activity are allocated directly to that activity. Shared costs which contribute to more than one activity and support costs which are not attributable to a single activity are apportioned between those activities on a basis consistent with the use of resources. Central staff costs are allocated on the basis of time spent, and depreciation charges allocated on the portion of the asset's use.

Support costs are those costs incurred directly in support of expenditure on the objects of the company and include project management carried out at Headquarters. Governance costs are those incurred in connection with administration of the company and compliance with constitutional and statutory requirements.

Charitable activities and Governance costs are costs incurred on the company's educational operations, including support costs and costs relating to the governance of the company apportioned to charitable activities.

Grants payable are charged in the year when the offer is made except in those cases where the offer is conditional, such grants being recognised as expenditure when the conditions attaching are fulfilled. Grants offered subject to conditions which have not been met at the year end are noted as a commitment, but not accrued as expenditure.

1.6 Tangible fixed assets and depreciation

A review for impairment of a fixed asset is carried out if events or changes in circumstances indicate that the carrying value of any fixed asset may not be recoverable. Shortfalls between the carrying value of fixed assets and their recoverable amounts are recognised as impairments. Impairment losses are recognised in the Statement of financial activities incorporating income and expenditure account.

Tangible fixed assets are carried at cost, net of depreciation and any provision for impairment. Depreciation is provided at rates calculated to write off the cost of fixed assets, less their estimated residual value, over their expected useful lives on the following bases:

Plant and machinery	-	25% straight line
Motor vehicles	-	25% straight line
Equipment	-	25% straight line

1.7 Interest receivable

Interest on funds held on deposit is included when receivable and the amount can be measured reliably by the company; this is normally upon notification of the interest paid or payable by the Bank.

1.8 Debtors

Trade and other debtors are recognised at the settlement amount after any trade discount offered. Prepayments are valued at the amount prepaid net of any trade discounts due.

1. ACCOUNTING POLICIES (continued)

1.9 Cash at Bank and in hand

Cash at bank and in hand includes cash and short term highly liquid investments with a short maturity of three months or less from the date of acquisition or opening of the deposit or similar account.

1.10 Liabilities and provisions

Liabilities are recognised when there is an obligation at the Balance sheet date as a result of a past event, it is probable that a transfer of economic benefit will be required in settlement, and the amount of the settlement can be estimated reliably. Liabilities are recognised at the amount that the company anticipates it will pay to settle the debt or the amount it has received as advanced payments for the goods or services it must provide. Provisions are measured at the best estimate of the amounts required to settle the obligation. Where the effect of the time value of money is material, the provision is based on the present value of those amounts, discounted at the pre-tax discount rate that reflects the risks specific to the liability. The unwinding of the discount is recognised within interest payable and similar charges.

1.11 Fund accounting

General funds are unrestricted funds which are available for use at the discretion of the Trustees in furtherance of the general objectives of the company and which have not been designated for other purposes.

2. INCOME FROM DONATIONS AND LEGACIES

	Unrestricted funds 2022 £	**Total funds 2022** £	*Total funds* 2021 £
Donated services	**148,352**	**148,352**	142,153
Donations	**31,648**	**31,648**	37,915
Sales	**789**	**789**	425
Other income	**-**	**-**	29,430
Total donations and legacies	**180,789**	**180,789**	209,923
Total 2021	209,923	209,923	

Donated services are provided by the trading subsidiaries of JBA Group Limited and are valued at standard chargeable rates.

3. INVESTMENT INCOME

	Unrestricted funds 2022 £	Total funds 2022 £	*Total funds 2021 £*
Interest received	**3,775**	**3,775**	3,053
Total 2021	3,053	3,053	

4. ANALYSIS OF GRANTS

	Grants to Institutions 2022 £	Grants to Support Activities 2022 £	Total 2022 £	*Total 2021 £*
Grants, Activities undertaken	**27,080**	**135,251**	**162,331**	164,447
Total 2021	46,852	117,595	164,447	

	2022 £	2021 £
Grants to institutions	**27,080**	46,852
Research projects	**32,806**	56,997
Project pipeline development	**19,732**	60,598
Training projects	**82,713**	-
Total	**162,331**	164,447

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2022

5. SUPPORT COSTS

	Activities undertaken £	Total 2022 £	Total 2021 £
Sub-Contractors associates	**31,731**	**31,731**	28,272
Sundry expenses	**774**	**774**	898
Communication and website	**13,982**	**13,982**	29,942
Computer consumables and software licences	**1,149**	**1,149**	532
Motor and travel expenses	**3,306**	**3,306**	1,752
Office costs	**4,218**	**4,218**	754
Insurance	**470**	**470**	601
Legal and professional	**-**	**-**	1,453
Depreciation	**3,217**	**3,217**	3,543
	58,847	**58,847**	67,747
Total 2021	67,747	67,747	

During the year ended 31 October 2022, the company incurred the following Governance costs:

£NIL (2021 - £*NIL*) included within the table above in respect of Activities undertaken directly.

£NIL (2021 - £*NIL*) included within the table above in respect of Support costs.

6. GOVERNANCE COSTS

	Unrestricted funds 2022 £	Total funds 2022 £	*Total funds* 2021 £
Accountancy fees	**2,244**	**2,244**	2,244
Bank charges	**42**	**42**	28
	2,286	**2,286**	2,272

7. NET INCOME/(EXPENDITURE)

This is stated after charging:

	2022 £	2021 £
Depreciation of tangible fixed assets:		
- owned by the charity	**3,217**	3,543

During the year, no Trustees received any remuneration (2021 - £NIL).
During the year, no Trustees received any benefits in kind (2021 - £NIL).
During the year, no Trustees received any reimbursement of expenses (2021 - £NIL).

8. EMPLOYEES

The company has no employees other than the Trustees, in both the current and previous year.

9. TANGIBLE FIXED ASSETS

	Plant and machinery £	Motor vehicles £	Equipment £	Total £
Cost				
At 1 November 2021 and 31 October 2022	**37,189**	**20,100**	**1,607**	**58,896**
Depreciation				
At 1 November 2021	**31,848**	**20,100**	**1,607**	**53,555**
Charge for the year	**3,217**	**-**	**-**	**3,217**
At 31 October 2022	**35,065**	**20,100**	**1,607**	**56,772**
Net book value				
At 31 October 2022	**2,124**	**-**	**-**	**2,124**
At 31 October 2021	5,341	-	-	5,341

10. DEBTORS

	2022 £	2021 £
Trade debtors	**-**	905
Other debtors	**1,000**	37,917
Prepayments and accrued income	**28,800**	-
	29,800	38,822

11. CREDITORS: Amounts falling due within one year

	2022 £	2021 £
Trade creditors	**3,896**	20,021
Other creditors	**18,342**	975
Accruals and deferred income	**1,868**	2,640
	24,106	23,636

12. STATEMENT OF FUNDS

STATEMENT OF FUNDS - CURRENT YEAR

	Balance at 1 November 2021 £	Income £	Expenditure £	Balance at 31 October 2022 £
Unrestricted funds				
General Funds	277,804	184,564	(223,464)	238,904

STATEMENT OF FUNDS - PRIOR YEAR

	Balance at 1 November 2020 £	*Income* £	*Expenditure* £	*Balance at 31 October 2021* £
General Funds	299,294	212,976	(234,466)	277,804
Total of funds	299,294	212,976	(234,466)	277,804

13. ANALYSIS OF NET ASSETS BETWEEN FUNDS

ANALYSIS OF NET ASSETS BETWEEN FUNDS - CURRENT YEAR

	Unrestricted funds 2022 £	Total funds 2022 £
Tangible fixed assets	**2,124**	**2,124**
Current assets	**265,534**	**265,534**
Creditors due within one year	**(28,754)**	**(28,754)**
	238,904	**238,904**

ANALYSIS OF NET ASSETS BETWEEN FUNDS - PRIOR YEAR

	Unrestricted funds 2021 £	*Total funds* 2021 £
Tangible fixed assets	5,341	5,341
Current assets	296,099	296,099
Creditors due within one year	(23,636)	(23,636)
	277,804	277,804

14. RELATED PARTY TRANSACTIONS

Included within debtors, amounts falling due within one year is an amount of £19,685 (2021 - £28,800) due from JBA Risk Management Limited. During the year, donations were received from JBA Risk Management Limited of £31,648 (2021 - £37,915).

During the year, donated services were received from Jeremy Benn Associates Limited of £148,352 (2021 - £142,085).

Both JBA Risk Management Limited and Jeremy Benn Associates Limited are under common control by virtue of the shareholdings and trusteeship of J R Benn.

JBA TRUST LIMITED

England & Wales - Charity number 1150278

Accounts

Company Registration Number 07840801

Charity number: 1150278

JBA TRUST LIMITED

UNAUDITED
FINANCIAL STATEMENTS

31 OCTOBER 2021

(A company limited by guarantee)

ArmstrongWatson®

Accountants, Business & Financial Advisers

JBA TRUST LIMITED

(A company limited by guarantee)

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JBA TRUST LIMITED

(A company limited by guarantee)

REFERENCE AND ADMINISTRATIVE DETAILS OF THE COMPANY, ITS TRUSTEES AND ADVISERS FOR THE YEAR ENDED 31 OCTOBER 2021

Trustees

Rob Lamb, JBA (Managing Director)
Jeremy Benn, JBA
Jim Hall, Oxford University
Keith Beven, Lancaster University
Nick Russell, Independent Financial Consultant

Company registered number

07840801

Charity registered number

1150278

Registered office

1 Broughton Park, Old Lane North, Broughton, Skipton, North Yorkshire, BD23 3FD

Company secretary

C Robson

Independent examiners

Armstrong Watson Audit Limited, Number 3, Acorn Business Park, Airedale Business Centre, Skipton, North Yorkshire, BD23 2UE

JBA TRUST LIMITED

(A company limited by guarantee)

TRUSTEES' REPORT
FOR THE YEAR ENDED 31 OCTOBER 2021

The Trustees present their annual report together with the financial statements of the company for the 1 November 2020 to 31 October 2021. The Trustees confirm that the Annual Report and financial statements of the company comply with the current statutory requirements, the requirements of the company's governing document and the provisions of the Statement of Recommended Practice (SORP), applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) as amended by Update Bulletin 1 (effective 1 January 2015).

Trustees' Annual Report

JBA Trust is a charity that aims to help people improve resilience to environmental risks through research, education and knowledge exchange. We work with leading academic researchers, NGOs, charities and the JBA Group of companies in four key areas:

- Providing training and education in schools and in the water management community.
- Facilitating collaboration between academia and industry to deliver high quality scientific research.
- Supporting post-graduate education by providing technical expertise and financial bursaries for taught postgraduate (e.g. PGCert, MSc) and research (e.g. MRes, PhD) studentships.
- Publishing and disseminating research outputs, enabling knowledge exchange and sharing good practice.

Director's Report

On behalf of the Trustees, I am pleased to present the JBA Trust annual report for the year November 2020 to October 2021. This year saw continued impacts of the Covid-19 pandemic, which affected our ability to run in-person meetings and events. We have been able to adapt to the challenges by continuing to develop our digital content, along with the use of online systems to hold "live" engagement events remotely. Despite the benefits of online technology, in-person events are still our preferred way to engage with groups using our physical models. Thankfully, we were able to resume some activity during the summer and to begin planning future events.

We are primarily a knowledge-sharing charity, and so partnerships are vital to our work. We were able to continue building both existing and new partnerships during the year, including support for the inaugural Institution of Civil Engineers David Butler Award and CityZen competition for students aged 16-18 years. Another highlight has been our links with the Fire and Rescue Service that are helping to develop new water safety resources.

Our support for scientific and engineering research continued to grow through our programme of sponsorship and in-kind assistance for postgraduate researchers, and our collaborative projects with universities. Investment in supporting doctoral researchers delivers public benefit through the knowledge that they publish, and through the professional research skills and training that they acquire. This year, one of our sponsored PhD students graduated and another is about to compete her thesis. Meanwhile, we continue to contribute to peer-reviewed journal papers in collaboration with our university partners, and to develop a pipeline of future projects. As in the previous year, it has been inspiring to see how our sponsored students and academic partners have adapted to the challenges of the pandemic.

We have continued to support students on taught programmes through online work placements and technical assistance with dissertation projects. Working with industry partners, we also provided financial help for 12 new postgraduate students entering taught courses related to water or environmental management.

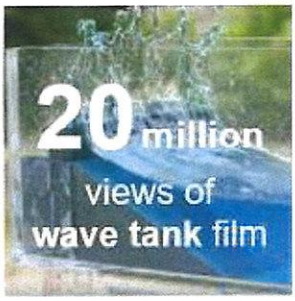
As ever, I am grateful to the JBA Group of companies for their continuing commitment to fund and host the JBA Trust, and to individual colleagues for giving their time and energy. We also thank the many partners we work with collaboratively, helping us to deliver on our charitable objectives.

Professor Rob Lamb, Managing Director

Highlights

12 scholarships and bursaries with funding







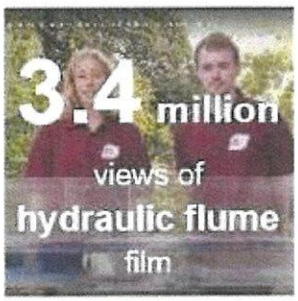
7 MSc projects, and placement students

20 flood risk & STEM education events

50k YouTube subscribers







10 physical models





Water safety partnership with Fire & Rescue Services

5 short films 'Careers for our future environment'



1 Environmental education and training

We support a wide range of activities aimed at encouraging students at schools and universities to develop or enhance their interests in water and environmental management, which could also ultimately lead them to pursue careers in the field. Our education and training activities also extend to the wider community, and to flood risk management professionals.

Digital learning resources

We created a package of online learning resources to support the STEM (Science, Technology, Engineering and Maths) curriculum in response to the restrictions of the first COVID-19 UK lockdowns in early 2020, when our normal educational outreach activities in schools and to the wider community were significantly limited. This put us in a good position to be able to continue our educational support activities during the subsequent lockdowns in this reporting year (Nov 2020 to Oct 2021) and also enabled us to reach a much wider audience.

Our digital learning resources have elements of engineering, maths and geography included in each topic in the context of flood risk and water management. They are packaged by age group (for schools) and include videos, worksheet activities, puzzles, case studies and exercises. In 2020-21, we developed and published new learning material on weather and climate change. The resources focus on understanding the principles of weather monitoring, why it is important and how this links to weather hazards and our changing climate.

We also developed maths resources in partnership with the North Yorkshire STEM Hub, supported the Mathematics Teacher Training Scholarship scheme and the Coastal Alliance Science Network events, and plan to continue to work with these organisations to highlight how maths is used in a wide variety of careers, including flood risk management, civil engineering and hydrology, and to support teachers and STEM/careers activities in schools. The learning resources can be accessed and downloaded at www.jbatrust.org/how-we-help/learning-resources/

Careers for our future environment

This year we have focused on creating video content to help inspire young people and to provide an insight into a variety of environmental science and engineering career opportunities.

Our series of five short 'Careers for our Future Environment' videos can be viewed on our YouTube careers playlist.



Physical models

Our physical models of catchments, rivers and coasts enable us to bring to life topics including flood risk, coastal and river engineering and nature-based solutions. At the beginning of 2020-21, the COVID-19 restrictions limited in-person events and we responded by delivering live 'virtual' demonstrations for schools to support the school STEM curriculum and highlight careers in environmental risk management. However, as restrictions eased, we were able to meet the significant increase in demand from primary and secondary schools for engaging and interactive demonstrations using the physical models.

Our suite of physical models includes four different sized hydraulic flumes, four wave tanks, an AR (Augmented Reality) sandbox and a PARM (Projection Augmented Relief Model). During 2020-21, the models were used at 20 events, including a secondary school session for 120 students on how maths is used to understand and mitigate coastal flood risk; and a primary school session for 90 students on river engineering and flood risk management.

An overview of our physical models is provided below.

Hydraulic flumes

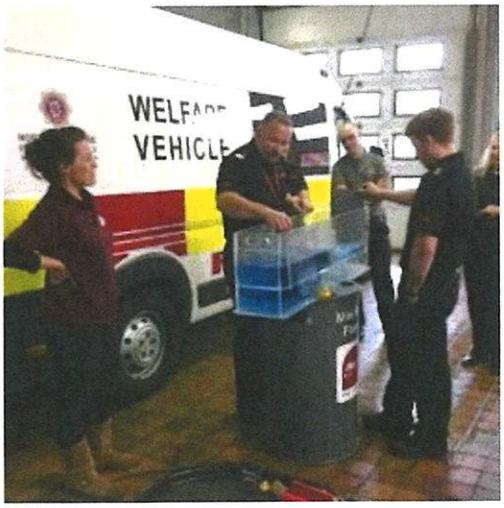
Our hydraulic flumes all show the flow of water in a simple channel, driven by a system of re-circulating pumps. Scale models of typical engineered structures such as weirs, bridges, culverts and debris screens show how different structures interact with the flow and affect flood risk.

The sectional flume (shown below) is the latest addition to our collection and is built in sections which can be clipped together in different combinations. It is specifically designed to demonstrate culvert and debris screen hydraulic behaviour and also includes models of pipes, arched culverts, service crossings and weirs.



The flume collection comprises:

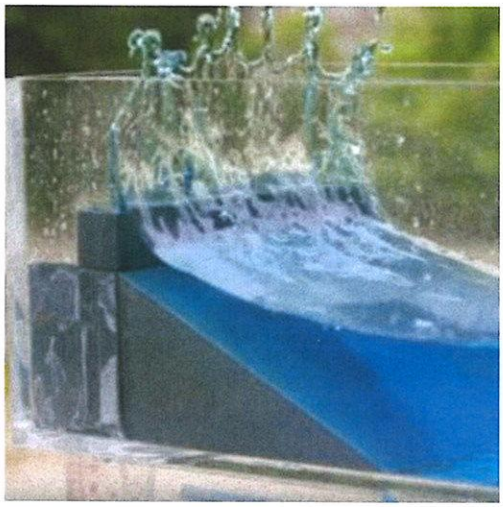
- Trailer flume – our first mobile river flume
- Free-standing flume – our largest single section flume
- Mini flume – a portable flume for use in the classroom
- Sectional flume – our most versatile flume



In partnership with the North Yorkshire Fire and Rescue Service and Hydrotec Consultants, we have also started to develop a new river flume to demonstrate water safety. We plan to co-create learning resources on water safety around river features and engineered structures, including weirs, waterfalls and strainers (culvert screens and debris).

The current video of the mini flume has a comprehensive commentary on how engineered structures affect flow in rivers and has had 3.3 million views on YouTube.

Wave tanks

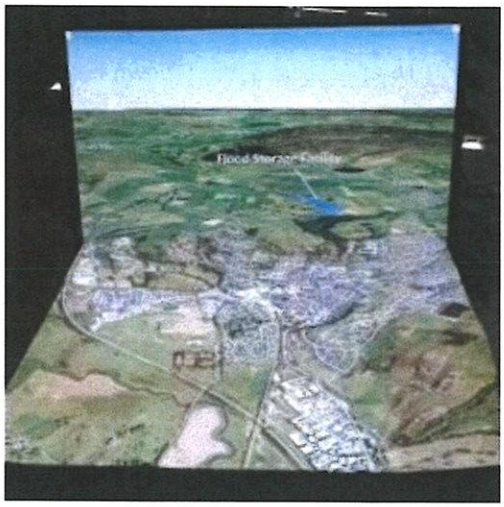


In the wave tanks, different types and combinations of coastal defences can be demonstrated, and their effectiveness at preventing overtopping and flood risk tested. It is portable and easy to set up in a classroom.

Our wave tank video shows the rates of overtopping for a beach during a storm surge, vertical and recurved sea walls, stepped and sloped revetments, rock armour and submerged near-shore breakwater.

The video has had 20 million views across various social media platforms, including the JBA Trust YouTube channel, and is also being used as a resource to support the Geography GCSE AQA curriculum.

PARM

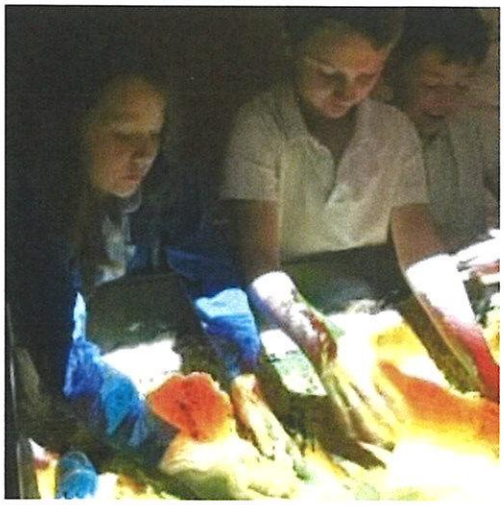


PARM (Projection Augmented Relief Model) tools use a 3D printed landscape based on remotely sensed terrain data to create an accurate model that is then augmented with projected images, for example of areas at risk of flooding.

PARM technology can make complex spatial information about landscape and the environment much easier to understand and can be used to support engagement with a variety of audiences including communities, schools and flood risk professionals.

We are continuing our collaboration with Dr Gary Priestnall at the University of Nottingham to investigate how effectively PARM technologies can communicate flood risk concepts and support decision making, compared to using traditional paper map-based imagery.

Augmented Reality Sandbox



The sandbox is a very interactive visualisation tool that shows how topography affects water moving through a catchment. Participants can shape the sand to create their own river catchments and valleys which are then 'augmented' in real time by a projector which shows a coloured elevation map and contour lines. Virtual rain can be introduced to explore how catchment management and river engineering can affect the flow of water.

The sandbox was used at various events, including at Great Ouseburn Primary School to help primary school pupils learn about water cycle processes in June 2021, and at the community launch event for the Skell Valley Project hosted by the National Trust in September 2021.

Weather station

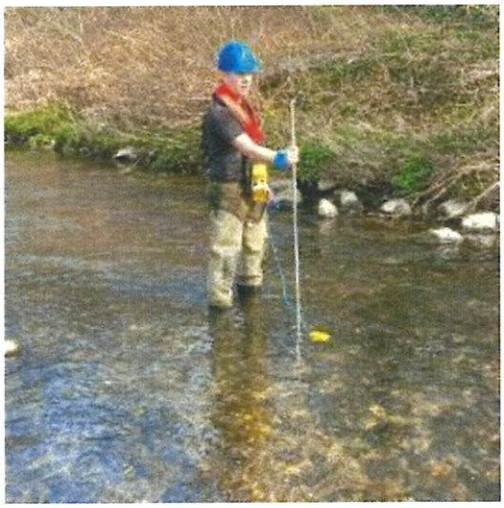


We installed a wireless Davis Vantage Pro 2 automatic weather station and manual rain gauge at our Broughton Park office near Skipton, North Yorkshire.

The weather station measures air temperature, humidity, wind speed and direction, rainfall and pressure. In addition, a manual rain gauge is read at 09:00 GMT each day for calibration purposes.

Data recorded from this weather station is freely available for use by schools, universities and communities. It can be used for a variety of educational projects, for example weather reporting, understanding meteorological measurements and data handling. Real time weather information is available on our weather station dashboard.

Flow meter



Our Valeport 'Braystoke' Model 001 flow meter is an easy to use and reliable method of measuring water velocity in a variety of open channel environments, including salt, fresh and effluent water, from shallow streams to tidal waterways, and is ideal for field study use and hydrometric work.

The portable flow meter and display unit are particularly useful for education and outreach activities, research and monitoring projects and flow gauging technique training.

This year, we have been developing resources to support its use by students, professional groups and communities. The resources are freely available on our flow meter webpage.



2 Science and research

One of our aims is to facilitate collaboration between academia and industry and deliver scientific research that improves society's understanding and management of environmental risks. We publish and disseminate the resulting research outputs, enabling knowledge exchange and sharing best practice.

Collaborative research

In 2020-21 we worked with universities, research institutions, public sector and charitable organisations. We are pleased to report on the good progress of the following collaborative research projects.

Flood Hydrology Roadmap

The flood hydrology roadmap is a 25-year vision and plan to advance all aspects of flood hydrology in the United Kingdom. It has been developed with inputs from more than 270 individuals from 50 organisations working in hydrology, flood management and related topics. The Environment Agency led and coordinated the roadmap's development on behalf of the wider flood hydrology community in the UK, which includes government organisations, academia and industry.

We have supported the roadmap project since it started in 2018 by participating in its steering group to provide advice, direction and peer review throughout the project.

During this reporting year we also co-presented a British Hydrological Society webinar to provide an update on the roadmap and to outline the delivery plan for its first 7 years.



Watch:

Flood hydrology roadmap

DRIFT Future Leaders Fellowship

Partners: University of Oxford

We are supporting Professor Louise Slater's Future Leaders Fellowship "Dynamic Drivers of Flood Risk (DRIFT)", which aims to develop a more comprehensive and holistic understanding of flood non-stationarity. It will support stakeholders in making the best planning decisions to manage flood risks while achieving other co-benefits.

This 4-year UKRI funded Fellowship has been co-designed with key partners including the Environment Agency, Flood Forecasting Centre, European Weather Centre (ECMWF), UK Centre for Ecology and Hydrology, Met Office, JBA, and United States Geological Survey.

Our support has included co-authorship of a paper on global changes in river floods, published in the journal Geophysical Research Letters.

The work showed that for floods with return periods of between 20 and 50 years, there is evidence of increased flood hazard in temperate climate zones, whereas there has been a decrease in flood hazard in arid, tropical, polar and cold zones.

Results for more extreme events (e.g. 100 years) were slightly different, with decreases in arid and temperate zones, mixed trends in cold zones, and increases at a small sample of tropical sites.

Access: Global changes in 20-Year, 50-Year, and 100-Year River Floods



The role of Digital Technologies in understanding, mitigating and adapting to environmental change

Partners: Lancaster University

We have been supporting a 5-year EPSRC funded research project at Lancaster University led by Professor Gordon Blair, looking at three areas of innovation: the Internet of Things (IoT), cloud computing and data science. In the first year the team focused on utilising digital technologies to enhance flood modelling within a concentrated programme of agile development – a "Flood Modelling Sprint".

We co-hosted and participated in workshops with the Lancaster University team in 2017 and 2018 to identify industry drivers and technology needs in applications of flood risk modelling. A wide range of organisations were part of this process including the Environment Agency, ECMWF, United Utilities, Oxford University, CEH and JBA.

The outputs of the workshops have been incorporated into the following research papers:

- Digital technology for "Models of Everywhere" (Blair, G. et al.) published in Environmental Modelling and Software.
- "Rethinking data-driven decision support in flood risk management for a big data age" (Towe et al.) published in Journal of Flood Risk Management.
- "The Role of Digital Technologies in Responding to the Grand Challenges of the Natural Environment: The Windermere Accord" (Blair et al.) published in the journal Patterns.
- "A semantic approach to enable data integration for the domain of flood risk management" (Nundloll et al.) published in the journal Environmental Challenges.

JBA Trust director Rob Lamb summarised the findings of this partnership by exploring how digital technology can support flood risk management in a podcast called "Rethinking Flood Risk Data".

Listen: Rethinking Flood Risk Data

DARE - Data Assimilation for the REsilient city

Partners: Reading University

We are working with Professor Sarah Dance at Reading University who was awarded a Fellowship (EPSRC Senior Fellow in Digital Technology for Living with Environmental Change) and is leading the DARE project - Data Assimilation for the REsilient city.

This project has led to the development of a PhD topic on data assimilation using Earth observation data for 2D flood modelling through the SCENARIO DTP (Doctoral Training Partnership) and with help from our sponsors we are supporting a doctoral research student, Helen Hooker.

Yorkshire iCASP

Partners: Led by Universities of Leeds, Sheffield and York, with the National Centre for Atmospheric Science. 16 additional 'springboard' partners (including industry, NGOs and government)

iCASP is a 5-year programme that will utilise £4.5m of NERC funding combined with in-kind and delivery support from partners to inform policy, investment decisions and new practice for regional and national agencies focusing on the Ouse catchment.

It aims to build on NERC-funded science in climate change, flooding, integrated catchment management, carbon storage in soils, water quality and water resources to generate economic, societal and environmental benefits in rural and urban areas of Yorkshire. JBA Trust are a 'springboard' partner and sit on the governance panel.

This year, our technical contribution supported the publication of a paper on "Enhanced Surface Water Flood Forecasts: User-led Development and Testing" (Birch et al.) in the Journal of Flood Risk Management.

This study developed and trialled new surface water flood (SWF) forecast products in a flood incident workshop and makes recommendations for the application of future forecast information and processes.

Access: Enhanced Surface Water Flood Forecasts: User-led Development and Testing


REGINAL ARTICLE CIWEM WILEY

Enhanced surface water flood forecasts: User-led development and testing

Abstract

INTRODUCTION

Outputs from our other contributions to the Yorkshire Region Climate Change Forum, for example providing case studies and guidance to enable organisations to update existing planning and assessment processes using UKCP18 data, are available below.

Access: iCASP resources and publications for UK climate projections

Historical chronology of flash flood and hail events

Partners: David Archer, Newcastle University and Reading University

This year, we added a database to our website, produced by David Archer, that lists flash flood events in Britain derived from historical reports dating back over more than 200 years. The aim is to support improved assessments of flash flood risk for a given location and more generally of catchment vulnerability to flash flooding. Flash floods arising from intense rainfall are rare events at a specific location and there may be few if any recent records. A search of a chronology of more than 200 years provides a better basis for assessing the probability of occurrence than the limited observations currently available, especially for surface water floods.

We have also supported a student dissertation project at Leeds University by Sam Watkiss, who explored the spatial patterns of events within the flood chronology.

This chronology originated in the "SINATRA" (Susceptibility of catchments to INTense RAinfall and flooding) research project that we worked on with Newcastle and Reading universities, within the UK NERC Flooding from Intense Rainfall programme.

Access: British Chronology of Flash Floods



Doctoral research projects

Our collaboration with universities across the UK enables us to support graduate researchers (research students) working on doctoral projects to develop advanced skills and deliver high quality research that helps enhance the understanding of a wide range of risks in the environment. We support doctoral researchers through a variety of programmes including doctoral training centres funded by UK Research and Innovation (UKRI).

This year, we were delighted to see another one of our research students, Eleanor Pearson, successfully complete her PhD. We also welcomed four new PhD students to our programme. All of the projects will use modelling techniques and new sources of data to help improve our understanding and mitigation of environmental risks.

- Freya Muir is researching coastal erosion real time monitoring and forecasting. The project is based at the University of Glasgow and funded by the NERC IAPETUS doctoral training programme.
- Sohaib Imran is investigating how we can use Earth observation data to assess and visualise spatial climate risks to businesses or sectors. The project is funded by the European Regional Development Fund through the Centre for Global Eco-Innovation based at Lancaster University.
- Helen Hooker is working to improve real time flood forecasting models using data assimilation from Earth observation and point data sources. The project is based at the University of Reading and funded by the NERC SCENARIO doctoral training programme.
- Luke Jenkins is researching the impact that sequences of storm events have on coasts and the subsequent impact on communities living in the coastal zone. The project is based at the University of Southampton and funded by the NERC INSPIRE doctoral training programme.

As our doctoral research programme matures, we are pleased to be able to share outputs of the projects, including peer reviewed publications.

Jake Grainger's paper on "Estimating the parameters of ocean wave spectra" was published in the journal Ocean Engineering and explores statistical techniques to improve the understanding of estimated parameters of wind-generated waves to help oceanographers gain insights into their behaviour.

Access: "Estimating the parameters of ocean wave spectra"


Ocean Engineering

Estimating the parameters of ocean wave spectra

All of the projects we supported in 2020-21 are summarised below; more information about each project can be found on the PhD research pages of our website.

Table 1. Summary of doctoral research projects

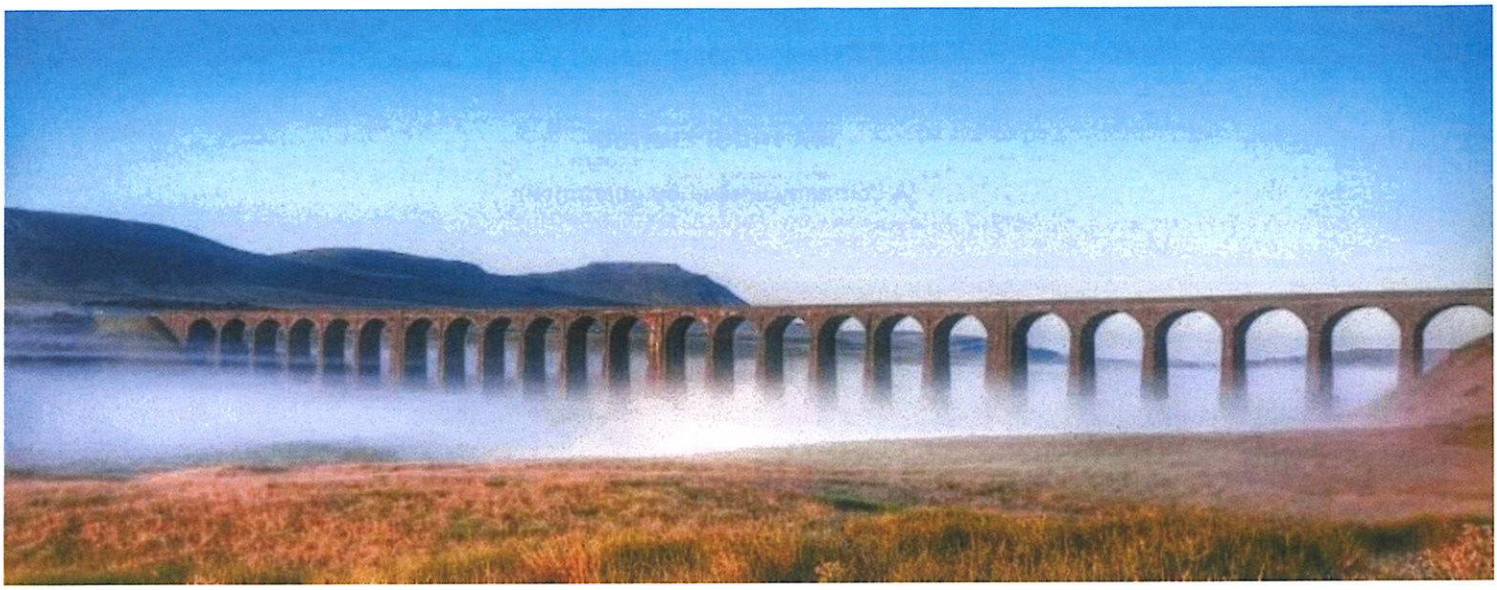
Topic	Partners	Researcher
Coastal erosion real time monitoring and forecasting	Glasgow University	Freya Muir
Enterprise climate risk modelling	Lancaster University	Sohaib Imran
Storm clustering and its influence on coastal morphology and defences	University of Southampton, Environment Agency	Luke Jenkins
Enhancing forecasting flood inundation mapping through data assimilation	Reading University	Helen Hooker
Understanding and estimating uncertainty in global flood risk models	University of Bristol	Georgios Sarailidis
Modelling wave interactions over space and time	Lancaster University	Jake Grainger
Examining the role of habitat quality in determining river ecosystem resilience to extreme flood events	University of Leeds, Environment Agency	Andrew Johnson
Estimating flood frequency using documentary and floodplain sedimentary archives to extend flood series	University of Lincoln, Environment Agency	Josephine Westlake
Multi-scale sediment and debris impacts of Natural Flood Management (NFM) measures	University of Leeds	Eleanor Pearson
Impact of woody debris on hydro-geomorphological processes and flood risk	University of Leeds, Yorkshire Dales Rivers Trust	Zora Van Leeuwen

Publication summary 2020-21

During the year, we supported and co-authored studies published as papers in peer-reviewed scientific journals. The peer review process can be lengthy, and so some of these papers report on research activity carried out in previous years.

Table 2. Summary of papers published in 2020-21

Title	Journal	Authors	Status
Enhanced Surface Water Flood Forecasts: User-led Development and Testing	Journal of Flood Risk Management	Birch et al.	Published
Estimating the parameters of ocean wave spectra	Ocean Engineering	Grainger et al.	Published
A semantic approach to enable data integration for the domain of flood risk management	Environmental Challenges	Nundloll et al.	Published
Knowledge gaps in our perceptual model of Great Britain's hydrology	Hydrological Processes	Wagener et al.	Published
Global Changes in 20-Year, 50-Year, and 100-Year River Floods	Geophysical Research Letters	Slater et al.	Published
A history of TOPMODEL	Hydrology and Earth System Sciences	Beven at al.	Published
The Role of Digital Technologies in Responding to the Grand Challenges of the Natural Environment: The Windermere Accord	Patterns	Blair et al.	Published
Rethinking data-driven decision support in flood risk management for a big data age	Journal of Flood Risk Management	Towe et al.	Published
Invited perspectives: challenges and future directions in improving bridge flood resilience	Natural Hazards and Earth System Sciences	Tubaldi et al.	Published



3 Support for students in higher education

There are many academic subjects that touch upon our core interests in environmental risks and resources. Whilst undergraduate courses such as Geography and Environmental or Physical Sciences are important, the relevant specialist training often comes into greater focus at postgraduate (masters or doctoral) level. JBA Trust therefore emphasises support for students and projects at this level.

Masters projects

JBA Trust helps provide students with placements, technical expertise and access to software resources and case study data, as well as offering a platform for them to share highlights from their research projects. The students we help have gained insight into how methodologies and techniques are applied in industry and have an opportunity to see how they will be able to use their skills in a future career.

In 2020-21, the JBA Trust helped seven students from the Universities of Leeds, Hull, Sheffield, Nottingham and Lancaster. The students worked with support from our colleagues in the JBA Group of companies on the following MRes, MSc and BSc projects:

- Education and training for building flood resilience capacity in the UK
- Investigating public perceptions and engagement relating to managed realignment
- Natural Capital Valuation for Broughton Hall Estate (MSc and BSc)
- Approaches to Climate Change Risk Assessment
- Development of the Skipton PARM
- Drought resilience assessment using UKCP18

We also support the dissemination and publication of the students' research. Poster summaries of the MSc projects are available on our MSc Research webpages.

The British Hydrological Society, JBA Trust and Environment Agency Studentship Awards

In 2020-21 we continued our partnership with the British Hydrological Society (BHS) and the Environment Agency to support students working towards MSc qualifications in hydrology, water resources, catchment management and other related subjects.

Ten bursaries of £1,500 were awarded and we have now supported 87 students since 2011.

Applications for these bursaries were managed using the web-based system that we developed in 2014 and have maintained since.

This continued to work well and enabled us to coordinate the assessment process with the BHS and Environment Agency effectively.



Flood and Coastal Risk Management Scholarships

The challenges of more frequent extreme weather and new flood risk responsibilities mean that there is a growing need for skilled water and environmental risk management professionals. This year we continued to provide support through our scholarships to fully fund the tuition fees for Lancaster University's Flood and Coastal Risk Management Postgraduate Certificate course.

Congratulations to Will Barber, Flood Risk Engineering & Strategy Officer, Coventry City Council, who successfully completed his PGCert this year. Recipients of the scholarship since 2014 are:

- Rebecca Croft, Assistant Flood & Coastal Erosion Risk Management Officer, Northumberland County Council
- Chloe Langley, Principal Flood Risk Management Officer, Nottingham City Council
- Will Barber, Flood Risk Engineering & Strategy Officer, Coventry City Council
- Michelle Fitzpatrick, engineer at the Vale of Glamorgan Council
- Vikki Teasdale, Senior SuDS Officer at Buckinghamshire County Council
- Allison Chapman, Flood Risk Engineer at Wirral Council
- Daniel Turner, Project Officer at the Yorkshire Dales Rivers Trust
- Peter Burrows, Development Engineer (SuDS) at Gateshead Council
- Faye Tomalin, Engineering Assistant in Flood and Coastal Risk Management at the Vale of Glamorgan Council
- Robin Gray, Pennine Prospects
- Stuart Edwards, North Yorkshire County Council



4 Building our reach and enabling knowledge exchange

Website

Our website enables people to easily access all our publications and educational resources, as well as find information about the Trust and our research projects. Our present website (www.jbatrust.org) launched in April 2016. It continues to help us deliver our charitable objectives of sharing best practice and supporting training and education.

There were over 18,000 pageviews of the website in 2020-21 and we received an average of between one and two enquiries a week through the website about research support, our physical models, bursaries and scholarships and support for educational activities and events.

Social media

We use Twitter to publicise research outputs, new resources, publications or scholarships and awards. The number of @JBATrust followers is steadily growing and by the end of 2020-21 we had 892 followers. We also have a Twitter account that shares updates from the weather station based at Broughton Park @JBATrustWeather.

YouTube channel

JBA Trust's YouTube channel hosts all our video resources and we now have nearly 50,000 subscribers.

This year we focused on creating video content to help inspire young people and to provide an insight into environmental science and engineering career opportunities including:

- Marine and coastal risk management analyst (Fay Luxford)
- Hydraulic modelling and flood mapping assistant (Conor Cunningham)
- Flood risk science analyst (Heather Forbes)
- Senior flood forecaster (Matt Cowdell)
- Engineer and flood risk specialist (Rebecca Alexandre)

Our most popular video continues to be the wave tank video with 8.1 million views on YouTube, followed by our video of the hydraulic flume which has had 3.3 million views. It has a comprehensive commentary on how engineered structures affect flow in rivers and is also available as seven separate chapters.

Global reach

This year we responded to over 60 requests from around the world for support and assistance from people who, having seen our physical model and weather station resources, would like to build their own or set up their own educational project. The contacts came through social media or our website contact us pages.

By sharing factsheets and detailed specifications for our models, we aim to enable people to create their own educational resources to support their communities and raise awareness of flood risk management. In some cases, we have established an on-going dialogue with people who have approached us to help them with their own projects. We have helped high school and college students, university researchers, teachers and private individuals.

5 Directors and trustees

The Trustees serving during the year were as follows:

Trustees	Rob Lamb, JBA	(Managing Director of JBA Trust)
	Jeremy Benn, JBA	
	Jim Hall, Oxford University	
	Keith Beven, Lancaster University	
	Nick Russell, Independent financial consultant	
Secretary	Craig Robson	

6 Structure, governance and management

JBA Trust is a company limited by guarantee and is governed by its Memorandum and Articles of Association. It was incorporated on 9 November 2011.

The trustees review the activities of JBA Trust every six months to ensure that they are focussed on supporting the purpose of the charity. The review also considers the strategic direction of the charity and considers how planned activities will contribute to public benefit.

We have referred to the guidance contained in the Charity Commission's general guidance on public benefit when reviewing our aims and objectives and in planning our future activities.

Appointment of trustees

On incorporation of the JBA Trust, the Board of Trustees was appointed by invitation.

To preserve independence of the JBA Trust from JBA Group companies, which provide part of its core funding, the JBA Trust's Articles of Association stipulate that the number of trustees connected to or employed by JBA Group shall always be less than half of the total number of trustees appointed at any given time.

The trustees are not remunerated (other than payment to cover travel and accommodation costs where required for JBA Trust business).

Trustee induction and training

Periodically, the trustees meet and are briefed on their legal obligations under charity and company law, updates to the Charity Commission's guidance on public benefit, the content of the Memorandum and Articles of Association and the JBA Trust business plan.

Organisation

The Board of Trustees meets every six months and is responsible for the strategic direction and policy of the charity. A Managing Director is appointed by the trustees to manage the day-to day operations of the charity and is supported by a Programme Manager.

Risk management

The trustees have a risk management strategy which comprises:

- An annual review of the risks the charity may face
- Policies and procedures in place to mitigate those risks
- Plans in place to minimise the impact of the risks should they materialise.

The principal risk to JBA Trust is financial sustainability. This is mitigated by having a robust reserves policy and a clear financial plan which is reviewed and subsequently approved by the trustees at the start of the financial year.

JBA Trust adopts policies and procedures from our host, the JBA Group, which are externally validated where applicable. These include policies on: Health and Safety; Energy Use; Environment; Sustainability; Social Responsibility; Equality and Diversity.

7 Financial review

The principal funding source for JBA Trust is JBA Group dividends. JBA Trust also aims to leverage funding for research projects by supporting partners in applying for funding from external organisations, for example Innovate UK or Research Councils. We also generate a small amount of additional income from hiring out our physical models to commercial organisations (no charges are made for educational or charitable activities). Personal donations are processed through an online giving platform that enables Gift Aid to be claimed efficiently.

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JBA TRUST LIMITED

(A company limited by guarantee)

INDEPENDENT EXAMINER'S REPORT FOR THE YEAR ENDED 31 OCTOBER 2021

INDEPENDENT EXAMINER'S REPORT TO THE TRUSTEES OF JBA TRUST LIMITED (the 'company')

I report to the charity Trustees on my examination of the accounts of the company for the year ended 31 October 2021.

This report is made solely to the company's Trustees, as a body, in accordance with Part 4 of the Charities (Accounts and Reports) Regulations 2008. My work has been undertaken so that I might state to the company's Trustees those matters I am required to state to them in an Independent examiner's report and for no other purpose. To the fullest extent permitted by law, I do not accept or assume responsibility to anyone other than the company and the company's Trustees as a body, for my work or for this report.

RESPONSIBILITIES AND BASIS OF REPORT

As the Trustees of the company (and its directors for the purposes of company law) you are responsible for the preparation of the accounts in accordance with the requirements of the Companies Act 2006 ('the 2006 Act').

Having satisfied myself that the accounts of the company are not required to be audited under Part 16 of the 2006 Act and are eligible for independent examination, I report in respect of my examination of the company's accounts carried out under section 145 of the Charities Act 2011 ('the 2011 Act'). In carrying out my examination I have followed the Directions given by the Charity Commission under section 145(5)(b) of the 2011 Act.

INDEPENDENT EXAMINER'S STATEMENT

I have completed my examination. I can confirm that no matters have come to my attention in connection with the examination giving me cause to believe:

1. accounting records were not kept in respect of the company as required by section 386 of the 2006 Act; or

2. the accounts do not accord with those records; or

3. the accounts do not comply with the accounting requirements of section 396 of the 2006 Act other than any requirement that the accounts give a 'true and fair' view which is not a matter considered as part of an independent examination; or

4. the accounts have not been prepared in accordance with the methods and principles of the Statement of Recommended Practice for accounting and reporting by charities [applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102).

I have no concerns and have come across no other matters in connection with the examination to which attention should be drawn in this report in order to enable a proper understanding of the accounts to be reached.

Signed: Rohan Day. Dated: 14 July 2022

Rohan Day FCA Armstrong Watson Audit Limited.

Armstrong Watson Audit Limited
Number 3
Acorn Business Park
Airedale Business Centre
Skipton
North Yorkshire
BD23 2UE

JBA TRUST LIMITED

(A company limited by guarantee)

STATEMENT OF FINANCIAL ACTIVITIES INCORPORATING INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 OCTOBER 2021

	Note	Unrestricted funds 2021 £	Total funds 2021 £	*Total funds* 2020 £
INCOME FROM:				
Donations and legacies	2	**209,923**	**209,923**	181,341
Investments	3	**3,053**	**3,053**	60
TOTAL INCOME		**212,976**	**212,976**	181,401
EXPENDITURE ON:				
Charitable activities	4,6,5	**234,466**	**234,466**	159,446
TOTAL EXPENDITURE		**234,466**	**234,466**	159,446
NET INCOME / (EXPENDITURE) BEFORE OTHER RECOGNISED GAINS AND LOSSES		**(21,490)**	**(21,490)**	21,955
NET MOVEMENT IN FUNDS		**(21,490)**	**(21,490)**	21,955
RECONCILIATION OF FUNDS:				
Total funds brought forward		**299,294**	**299,294**	277,339
TOTAL FUNDS CARRIED FORWARD		**277,804**	**277,804**	299,294

The notes on pages 6 to 12 form part of these financial statements.

JBA TRUST LIMITED

(A company limited by guarantee)

STATEMENT OF FINANCIAL ACTIVITIES INCORPORATING INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 OCTOBER 2021

	Note	Unrestricted funds 2021 £	Total funds 2021 £	*Total funds* 2020 £
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NET MOVEMENT IN FUNDS		**(21,490)**	**(21,490)**	21,955
RECONCILIATION OF FUNDS:				
Total funds brought forward		**299,294**	**299,294**	277,339
TOTAL FUNDS CARRIED FORWARD		**277,804**	**277,804**	299,294

The notes on pages 6 to 12 form part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2021

1. ACCOUNTING POLICIES

1.1 Basis of preparation of financial statements

The financial statements have been prepared in accordance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) - (Charities SORP (FRS 102)), the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Companies Act 2006.

JBA Trust Limited meets the definition of a public benefit entity under FRS 102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy.

The principal activity of the company is to enhance understanding and management of risks in the water environment by enabling research, education and training.

The company is a company limited by guarantee incorporated and domiciled in the United Kingdom.

These financial statements have been presented in Pound Sterling as this is the currency of the primary economic environment in which the company operates.

1.2 Company status

The company is a company limited by guarantee. The members of the company are the Trustees named on page 1. In the event of the company being wound up, the liability in respect of the guarantee is limited to £10 per member of the company.

1.3 Going concern

Since March 2020 the global COVID-19 pandemic has had a significant economic and social impact worldwide. The trustees are aware of the effects that this may continue to have on the company and will continue to review and adopt suitable operational strategies in order to safeguard the business for the ensuing 12 months. The financial statements have been prepared on the going concern basis. This is based on the continued financial support of its sponsors and creditors, which is confirmed at regular intervals, allied to the maintenance of a robust reserves policy.

1.4 Income

All income is recognised once the company has entitlement to the income, it is probable that the income will be received and the amount of income receivable can be measured reliably.

Donated services or facilities are recognised when the company has control over the item, any conditions associated with the donated item have been met, the receipt of economic benefit from the use of the company of the item is probable and that economic benefit can be measured reliably. In accordance with the Charities SORP (FRS 102), the general volunteer time of the Friends is not recognised and refer to the Trustees' report for more information about their contribution.

On receipt, donated professional services and donated facilities are recognised on the basis of the value of the gift to the company which is the amount the company would have been willing to pay to obtain services or facilities of equivalent economic benefit on the open market; a corresponding amount is then recognised in expenditure in the period of receipt.

Income tax recoverable in relation to donations received under Gift Aid or deeds of covenant is recognised at the time of the donation.

Income tax recoverable in relation to investment income is recognised at the time the investment income is receivable.

1. ACCOUNTING POLICIES (continued)

1.5 Expenditure

Expenditure is recognised once there is a legal or constructive obligation to transfer economic benefit to a third party, it is probable that a transfer of economic benefits will be required in settlement and the amount of the obligation can be measured reliably. Expenditure is classified by activity. The costs of each activity are made up of the total of direct costs and shared costs, including support costs involved in undertaking each activity. Direct costs attributable to a single activity are allocated directly to that activity. Shared costs which contribute to more than one activity and support costs which are not attributable to a single activity are apportioned between those activities on a basis consistent with the use of resources. Central staff costs are allocated on the basis of time spent, and depreciation charges allocated on the portion of the asset's use.

Support costs are those costs incurred directly in support of expenditure on the objects of the company and include project management carried out at Headquarters. Governance costs are those incurred in connection with administration of the company and compliance with constitutional and statutory requirements.

Charitable activities and Governance costs are costs incurred on the company's educational operations, including support costs and costs relating to the governance of the company apportioned to charitable activities.

Grants payable are charged in the year when the offer is made except in those cases where the offer is conditional, such grants being recognised as expenditure when the conditions attaching are fulfilled. Grants offered subject to conditions which have not been met at the year end are noted as a commitment, but not accrued as expenditure.

1.6 Tangible fixed assets and depreciation

A review for impairment of a fixed asset is carried out if events or changes in circumstances indicate that the carrying value of any fixed asset may not be recoverable. Shortfalls between the carrying value of fixed assets and their recoverable amounts are recognised as impairments. Impairment losses are recognised in the Statement of financial activities incorporating income and expenditure account.

Tangible fixed assets are carried at cost, net of depreciation and any provision for impairment. Depreciation is provided at rates calculated to write off the cost of fixed assets, less their estimated residual value, over their expected useful lives on the following bases:

Plant and machinery	-	25% straight line
Motor vehicles	-	25% straight line
Equipment	-	25% straight line

1.7 Interest receivable

Interest on funds held on deposit is included when receivable and the amount can be measured reliably by the company; this is normally upon notification of the interest paid or payable by the Bank.

1.8 Debtors

Trade and other debtors are recognised at the settlement amount after any trade discount offered. Prepayments are valued at the amount prepaid net of any trade discounts due.

1. ACCOUNTING POLICIES (continued)

1.9 Cash at Bank and in hand

Cash at bank and in hand includes cash and short term highly liquid investments with a short maturity of three months or less from the date of acquisition or opening of the deposit or similar account.

1.10 Liabilities and provisions

Liabilities are recognised when there is an obligation at the Balance sheet date as a result of a past event, it is probable that a transfer of economic benefit will be required in settlement, and the amount of the settlement can be estimated reliably. Liabilities are recognised at the amount that the company anticipates it will pay to settle the debt or the amount it has received as advanced payments for the goods or services it must provide. Provisions are measured at the best estimate of the amounts required to settle the obligation. Where the effect of the time value of money is material, the provision is based on the present value of those amounts, discounted at the pre-tax discount rate that reflects the risks specific to the liability. The unwinding of the discount is recognised within interest payable and similar charges.

1.11 Fund accounting

General funds are unrestricted funds which are available for use at the discretion of the Trustees in furtherance of the general objectives of the company and which have not been designated for other purposes.

2. INCOME FROM DONATIONS AND LEGACIES

	Unrestricted funds 2021 £	**Total funds 2021** £	*Total funds* 2020 £
Donations	**142,153**	**142,153**	116,193
Donated services	**37,915**	**37,915**	60,245
Sales	**425**	**425**	4,903
Other income	**29,430**	**29,430**	-
Total donations and legacies	**209,923**	**209,923**	181,341
Total 2020	181,341	181,341	

Donated services are provided by the trading subsidiaries of JBA Group Limited and are valued at standard chargeable rates.

3. INVESTMENT INCOME

	Unrestricted funds 2021 £	Total funds 2021 £	*Total funds* 2020 £
Interest received	3,053	3,053	60
Total 2020	60	60	

4. ANALYSIS OF GRANTS

	Grants to Institutions 2021 £	Grants to Support Activities 2021 £	Total 2021 £	*Total* 2020 £
Grants, Activities undertaken	46,852	117,595	164,447	106,331
Total 2020	14,048	92,283	106,331	

	2021 £	2020 £
Grants to institutions	46,852	14,048
Research projects	56,997	32,262
Project pipeline development	60,598	20,228
Training projects	-	39,793
Total	164,447	106,331

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2021

5. SUPPORT COSTS

	Activities undertaken £	Total 2021 £	Total 2020 £
Sub-Contractors associates	**28,272**	**28,272**	11,900
Sundry expenses	**898**	**898**	1,580
Communication and website	**29,942**	**29,942**	25,547
Computer consumables and software licences	**532**	**532**	452
Motor and travel expenses	**1,752**	**1,752**	2,057
Office costs	**754**	**754**	3,880
Insurance	**601**	**601**	509
Legal and professional	**1,453**	**1,453**	13
Depreciation	**3,543**	**3,543**	4,952
	67,747	**67,747**	50,890
Total 2020	50,890	50,890	

6. GOVERNANCE COSTS

	Unrestricted funds 2021 £	Total funds 2021 £	*Total funds* 2020 £
Accountancy fees	**2,244**	**2,244**	2,202
Bank charges	**28**	**28**	23
	2,272	**2,272**	2,225

7. NET INCOME/(EXPENDITURE)

This is stated after charging:

	2021 £	2020 £
Depreciation of tangible fixed assets:		
- owned by the charity	**3,543**	4,952

During the year, no Trustees received any remuneration (2020 - £NIL).
During the year, no Trustees received any benefits in kind (2020 - £NIL).
During the year, no Trustees received any reimbursement of expenses (2020 - £NIL).

8. EMPLOYEES

The company has no employees other than the Trustees, in both the current and previous year.

9. TANGIBLE FIXED ASSETS

	Plant and machinery £	Motor vehicles £	Equipment £	Total £
Cost				
At 1 November 2020 and 31 October 2021	**37,189**	**20,100**	**1,607**	**58,896**
Depreciation				
At 1 November 2020	**28,329**	**20,100**	**1,583**	**50,012**
Charge for the year	**3,519**	**-**	**24**	**3,543**
At 31 October 2021	**31,848**	**20,100**	**1,607**	**53,555**
Net book value				
At 31 October 2021	**5,341**	**-**	**-**	**5,341**
At 31 October 2020	8,860	-	24	8,884

10. DEBTORS

	2021 £	2020 £
Trade debtors	**905**	350
Other debtors	**37,917**	51,430
	38,822	51,780

11. CREDITORS: Amounts falling due within one year

	2021 £	2020 £
Trade creditors	**20,021**	9,092
Other creditors	**975**	-
Accruals and deferred income	**2,640**	2,640
	23,636	11,732

12. STATEMENT OF FUNDS

STATEMENT OF FUNDS - CURRENT YEAR

	Balance at 1 November 2020 £	Income £	Expenditure £	Balance at 31 October 2021 £
Unrestricted funds				
General Funds	299,294	212,976	(234,466)	277,804

STATEMENT OF FUNDS - PRIOR YEAR

	Balance at 1 November 2019 £	*Income* £	*Expenditure* £	*Balance at 31 October 2020* £
General Funds	277,339	181,401	(159,446)	299,294
Total of funds	277,339	181,401	(159,446)	299,294

13. ANALYSIS OF NET ASSETS BETWEEN FUNDS

ANALYSIS OF NET ASSETS BETWEEN FUNDS - CURRENT YEAR

	Unrestricted funds 2021 £	Total funds 2021 £
Tangible fixed assets	**5,341**	**5,341**
Current assets	**296,099**	**296,099**
Creditors due within one year	**(23,636)**	**(23,636)**
	277,804	277,804

12. STATEMENT OF FUNDS (continued)

ANALYSIS OF NET ASSETS BETWEEN FUNDS - PRIOR YEAR

	Unrestricted funds 2020 £	*Total funds* 2020 £
Tangible fixed assets	8,884	8,884
Current assets	302,142	302,142
Creditors due within one year	(11,732)	(11,732)
	299,294	299,294

14. RELATED PARTY TRANSACTIONS

Included within debtors, amounts falling due within one year is an amount of £28,800 (2020 - £51,427) due from JBA Risk Management Limited. During the year, donations were received from JBA Risk Management Limited of £37,915 (2020 - £57,600).

During the year, donated services were received from Jeremy Benn Associates Limited of £142,085 (2020 - £118,607).

Both JBA Risk Management Limited and Jeremy Benn Associates Limited are under common control by virtue of the shareholdings and trusteeship of J R Benn.

JBA TRUST LIMITED

England & Wales - Charity number 1150278

Accounts

Company Registration Number 07840801

Charity number: 1150278

JBA TRUST LIMITED

UNAUDITED
FINANCIAL STATEMENTS

31 OCTOBER 2020

(A company limited by guarantee)

ArmstrongWatson®

Accountants, Business & Financial Advisers

JBA TRUST LIMITED

(A company limited by guarantee)

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JBA TRUST LIMITED

(A company limited by guarantee)

REFERENCE AND ADMINISTRATIVE DETAILS OF THE COMPANY, ITS TRUSTEES AND ADVISERS FOR THE YEAR ENDED 31 OCTOBER 2020

Trustees

Rob Lamb, JBA (Managing Director)
Jeremy Benn, JBA
Jim Hall, University of Oxford
Keith Beven, Lancaster University
Nick Russell, Independent Financial Consultant

Company registered number

07840801

Charity registered number

1150278

Registered office

1 Broughton Park, Old Lane North, Broughton, Skipton, North Yorkshire, BD23 3FD

Company secretary

C Robson

Independent examiners

Armstrong Watson Audit Limited, Number 3, Acorn Business Park, Airedale Business Centre, Skipton, North Yorkshire, BD23 2UE

JBA TRUST LIMITED

(A company limited by guarantee)

TRUSTEES' REPORT
FOR THE YEAR ENDED 31 OCTOBER 2020

The Trustees present their annual report together with the financial statements of the company for the 1 November 2019 to 31 October 2020. The Trustees confirm that the Annual Report and financial statements of the company comply with the current statutory requirements, the requirements of the company's governing document and the provisions of the Statement of Recommended Practice (SORP), applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) as amended by Update Bulletin 1 (effective 1 January 2015).

Trustees Annual Report

The JBA Trust is a charity that enhances understanding and management of risks in the water environment by enabling research, education and training.

We work with leading academic researchers, NGOs, charities and the JBA Group of companies in four key areas:

- Providing training and education in schools and in the water management community
- Facilitating collaboration between academia and industry to deliver high quality scientific research
- Supporting post-graduate education by providing technical expertise and financial bursaries for taught postgraduate (e.g. PGCert, MSc) and research (e.g. MRes, PhD) studentships
- Publishing and disseminating research outputs, enabling knowledge exchange and sharing good practice

Director's Report

This year has tested everyone's resilience. Despite lockdowns and restrictions on society in 2020, we have been fortunate to have continued support from our sponsors.

We have also had to adapt. Our strategy has always been to take a wide range of approaches in promoting research, supporting education and sharing knowledge. We have blended in-person engagement at events, often using our physical models, with digital content. We have attended and supported conferences and meetings, whilst also using online collaboration tools and publishing research. We adopted this multi-modal strategy because we thought, and still think, it is the most effective way for us to deliver public benefit. But it has also given us the capacity to adapt over the past year.

Our usually busy schedule of engagement events paused completely in March 2020 with the onset of strict public health measures in the UK. We quickly shifted our focus to digital content with the launch of a set of online resource packs, driven by the sudden switch to home learning. Our packs are geared towards two school age ranges, and to higher education. I am pleased to say that more than 2,700 visitors have accessed our learning packs since we published them.

We have been learning, along with all our partners, about how to "do" research and knowledge-sharing through lockdowns, social distancing and working from home (or is it living at work?). We have contributed to academic conferences that moved online, and continue to see outputs being produced from our research collaborations, with seven peer-reviewed journal papers published over the last year. Our academic partners have been making huge efforts to adapt and keep projects going, especially

where this has involved changes, sometimes extensive, to planned lab work, field visits or physical model applications.

It's been heartening to see the graduate researchers we support finding ways to keep their projects moving forwards. We have been able to help four graduate students approach and achieve successful completion of their doctorates. I am very pleased that we have also supported new graduate researchers starting PhD projects this year, working on important topics in environmental risks and resilience. Starting a three- or four-year research project is a big commitment and daunting enough in any circumstances, let alone having to do it all through online meetings. Hopefully, we will be able to meet in person before too long.

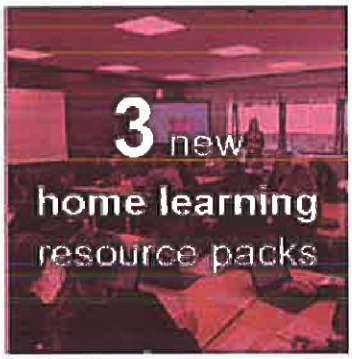
Looking ahead to the coming year, we are adapting our plans and systems of work in the hope that we may be able to safely re-introduce some in-person engagement activities. Meanwhile, we will continue to focus on digital content. Covid-19 is causing significant disruption to learning at all levels, which will doubtless have repercussions over the coming years. We will be exploring how we can keep helping students and educators through our digital resources, interactive online events and "virtual" placements.

The Covid-19 pandemic has caused almost everyone to take an immediate and pressing stake in risk analysis, modelling and data. It has concentrated attention on the connections between health, society, environment, economies and communities. Increasingly, there is a sense of urgency about our relationship with the environment. We need skilled, knowledgeable people across a wide range of scientific, engineering, technical and creative disciplines to tackle environmental challenges of resilience and sustainability, along with recovery from the pandemic. We will increase our support for graduate training over the coming year and will be exploring further ways in which we can help create opportunities for education and training at different levels.

Finally, a word of thanks to the directors of the JBA Group companies for their commitment to the JBA Trust, and, in particular, the individuals who have at various times offered and given extra in-kind support privately to help us with our work during a difficult year.

Professor Rob Lamb, Managing Director

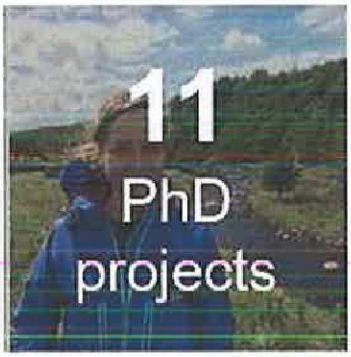
Highlights



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scholarships and bursaries with funding



10
physical models

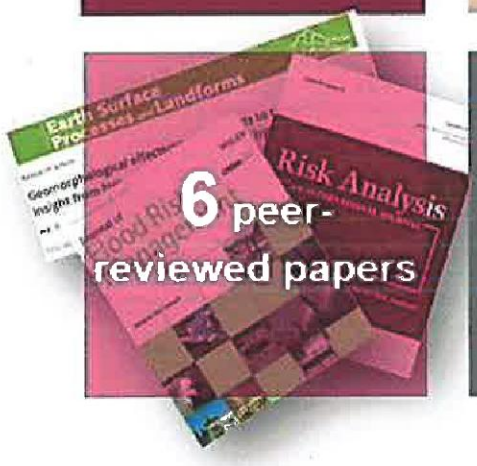


20
flood risk education events

6.9 million
views of wave tank video

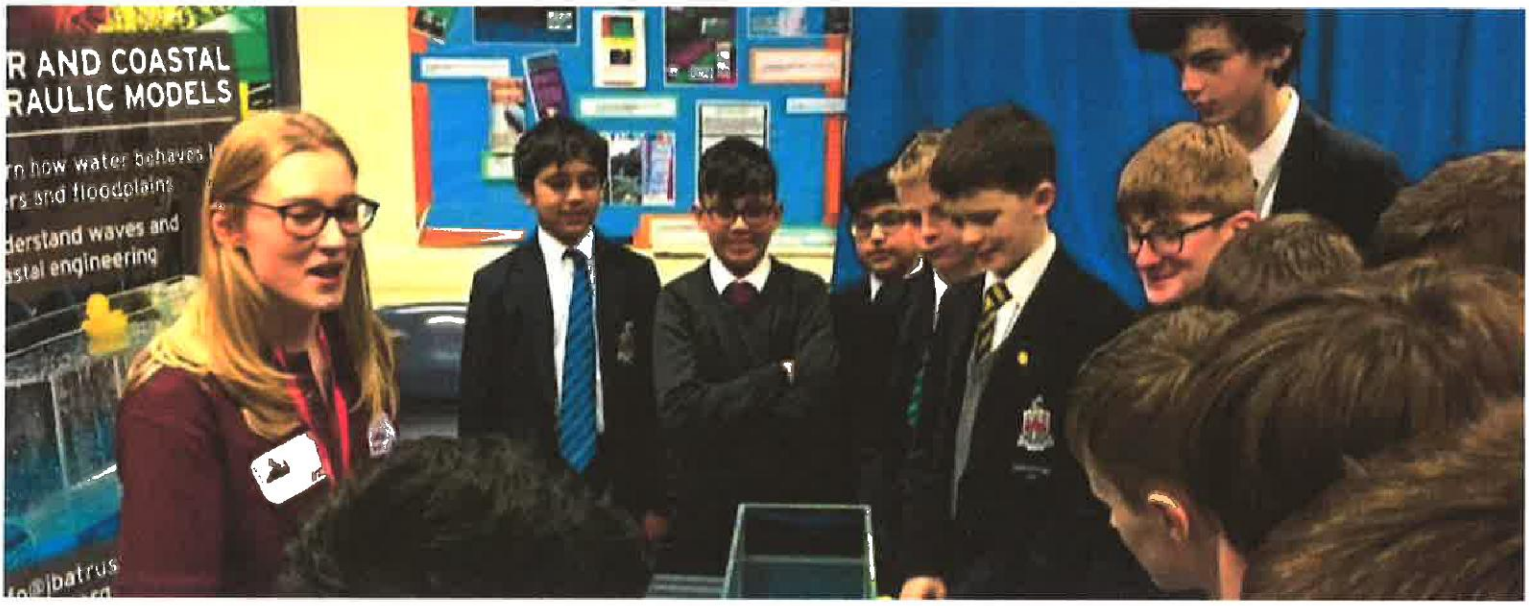


7
MSc projects, and placement students



1.7 million
views of **new hydraulic flume** video





1 Environmental education and training

We support a wide range of activities aimed at encouraging students at schools and universities across the country to develop or enhance their interests in water and environmental management, which could also ultimately lead them to pursue careers in the field. Our education and training activities also extend to the wider community, and to flood risk management professionals.

Home learning resources

From March 2020, COVID-19 restrictions meant that our normal educational outreach activities in schools and to the wider community, in particular our physical model demonstrations, were significantly limited. However, we were able to adapt our activities and continue our support for the STEM (Science, Technology, Engineering and Maths) curriculum. In response to the first COVID lockdown in the UK, we focused on supporting those having to learn from home by creating and launching three new packages of online home learning resources in April 2020.

The home learning resources are packaged by age and have the STEM curriculum at their heart, with elements of engineering, maths and geography included in each topic in the context of flood risk and water management. Our physical models play a big part in many of the topics, but others can be explored without a demonstration model. The resources include videos, worksheet activities, puzzles, case studies and exercises. There were 2,700 visits to our learning resource packs, with over 1,000 individual resources downloaded. The learning resources can be accessed and downloaded at www.jbatrust.org/how-we-help/learning-resources/.



Physical models

Prior to COVID-19 restrictions, we were able to use our physical models of rivers and coasts to raise awareness, and demonstrate the technical principles, of flood and coastal risk management. Our suite of physical models includes four different sized hydraulic flumes, two wave tanks, an AR (Augmented Reality) sandbox and a PARM (Projection Augmented Relief Model).

We demonstrated these models at schools and events across the country to support the school curriculum, STEM events and highlight careers in environmental risk management.

In 2019-20, the flumes were used at 11 events, including three primary schools and two secondary schools. Our mini flume was also used to support a community event held by the River Worth Friends, a group which aims to raise the status of the river amongst local people. An overview of our physical models is provided below.

Hydraulic flumes

Our hydraulic flumes all show the flow of water in a simple channel, driven by a system of re-circulating pumps. The collection comprises a trailer flume, a free-standing flume, a mini flume and a sectional flume. Scale models of typical engineered structures such as weirs, bridges, culverts and debris screens show how different structures interact with the flow and affect flood risk.



The sectional hydraulic flume is the latest addition to our suite of models. Built in sections, which can be clipped together in different combinations, this flume is specifically designed to demonstrate culvert and debris screen hydraulic behaviour.

Different structures and lengths of channel can be combined with varying water flow rates to represent a wider variety of situations than in our simpler models. The new flume can be extended in one metre increments, from 1m to 5m long. There are also 10° and 30° bend modules.

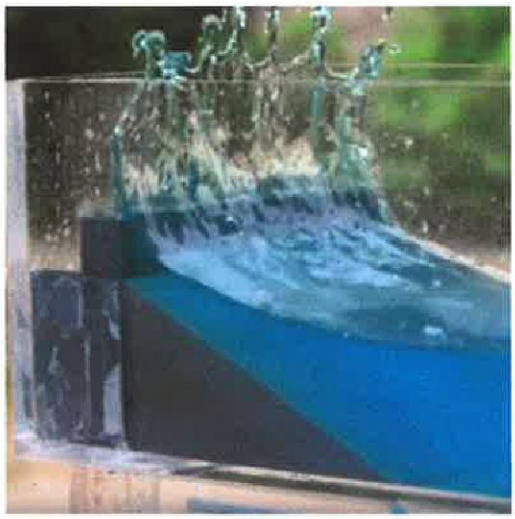


Pipes, arched culverts, service crossings and debris or security screens can be added in any order or combination, to show how they affect flow rates and water levels. The flume can also demonstrate the effect of changes in gradient and flow rate on water levels, as well as variations in channel roughness.

This year we uploaded new videos of the hydraulic flume with a comprehensive commentary on how engineered structures affect flow in rivers. The video has had 1.9 million views since it was posted in January 2020.

Wave tanks

In the wave tanks, different types and combinations of coastal defences can be demonstrated, and their effectiveness at preventing overtopping and flood risk tested.



Our wave tank education video shows the rates of overtopping for a beach during a storm surge, vertical and recurved sea walls, stepped and sloped revetments, rock armour and submerged near-shore breakwater. It has had 6.9 million views on the JBA Trust YouTube channel since it was posted in October 2016.

The video is also being used a resource to support the Geography GCSE AQA curriculum.

PARM

PARM (Projection Augmented Relief Model) tools use a 3D printed landscape based on LIDAR data to create an accurate model that is then augmented with projected images, for example of areas at risk of flooding.



We are continuing our collaboration with Dr Gary Priestnall at the University of Nottingham to communicate about flood risk in Skipton, North Yorkshire. We supported Emily Richardson, a research-based Masters student, to explore how a 'virtual' online PARM simulator helps people understand flood risk, helping her to adapt her research to the Covid-19 restrictions. Emily's research will help us target our education and engagement activities to improve how we communicate about flood risk concepts and strategic decision making.

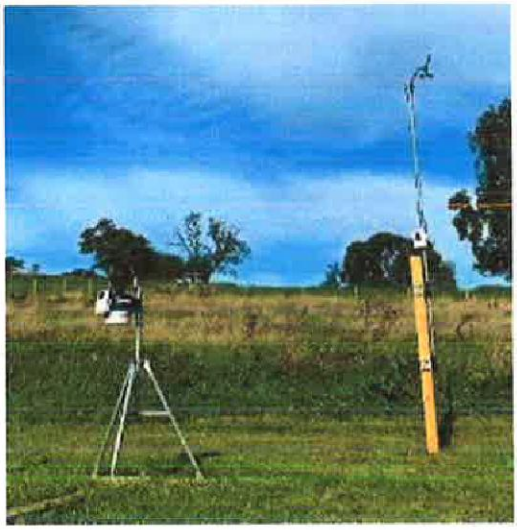
Augmented Reality Sandbox

The sandbox is a very interactive visualisation tool that shows how topography affects water moving through a catchment. Participants can shape the sand to create their own river catchments and valleys which are then 'augmented' in real time by a projector which shows a coloured elevation map and contour lines. Virtual rain can be introduced to explore how catchment management and river engineering can affect the flow of water.



The sandbox and PARM were used at an Interactive Geography Day, delivered for 120 pupils at Ermysted's School in Skipton, in January 2020. The models were also used for eight other public engagement, careers and training events, including one at the Wildfowl & Wetlands Trust in Slimbridge in February 2020.

Weather station



We installed a wireless Davis Vantage Pro 2 automatic weather station and manual rain gauge at our Broughton Park office near Skipton, North Yorkshire.

The weather station measures air temperature, humidity, wind speed and direction, rainfall and pressure. In addition, a manual rain gauge is read at 09:00 GMT each day for calibration purposes.

Data recorded from this weather station is freely available for use by schools, universities and communities. It can be used for a variety of educational projects, for example weather reporting, data handling and understanding meteorological measurements.

Real time weather information is available on our weather station dashboard.

Flow meter



Our Valeport 'Braystoke' Model 001 flow meter is an easy to use and reliable method of measuring water velocity in a variety of open channel environments, including salt, fresh and effluent water, from shallow streams to tidal waterways, and is ideal for field study use and hydrometric work. The portable flow meter and display unit are particularly useful for education and outreach activities, research and monitoring projects and flow gauging technique training. This year, we have been developing resources to support its use by students, professional groups and communities.

The flow meter was kindly donated by the Canal and River Trust in October 2019.



2 Science and research

One of the aims of JBA Trust is to facilitate collaboration between academia and industry and deliver scientific research that improves society's understanding and management of risks in the environment. We publish and disseminate the resulting research outputs, enabling knowledge exchange and sharing best practice.

Collaborative research

In 2019-20 we worked with universities, research institutions, public sector and charitable organisations. We are pleased to report on the good progress of the following collaborative research projects.

Third UK Climate Change Risk Assessment

The Third UK Climate Change Risk Assessment (CCRA) report was published in July 2020. It updates the projections of current and future flood risk to predict how flood risk would affect properties, people and assets in the mid to late century.

The analysis considered river, coastal, surface water and groundwater flooding, taking into account population growth, adaptation measures and climate change using the new UKCP18 climate projections.

The CCRA Evidence Report is used to inform the UK Government's actions to adapt to the challenges of climate change.

We supported the CCRA through co-authorship of the research on future flood risk, including analysis of the role of nature-based flood risk management approaches.

Access the Third UK Climate Change Risk Assessment, Future Flood Risk (CCRA) reports



The role of Digital Technologies in understanding, mitigating and adapting to environmental change

Partners: Lancaster University

We have been supporting a 5-year EPSRC funded research project at Lancaster University led by Professor Gordon Blair, looking at three areas of innovation: the Internet of Things (IoT), cloud computing and data science. In the first year the team focused on utilising digital technologies to enhance flood modelling within a concentrated programme of agile development – a "Flood Modelling Sprint".

We co-hosted and participated in workshops with the Lancaster University team in 2017 and 2018 to identify industry drivers and technology needs in applications of flood risk modelling. A wide range of organisations were part of this process including the Environment Agency, ECMWF, United Utilities, Oxford University, CEH and JBA.

The outputs of the workshops were incorporated into research papers, including a publication in the journal Environmental Modelling and Software on "Models of Everywhere revisited", in December 2019. The paper is a technological perspective on an approach to environmental modelling that emphasises models to learn about places.

We also contributed to a paper on data-driven decision support in flood risk management published in the Journal of Flood Risk Management in August 2020. This work demonstrated examples of the use of semantically-enriched data, natural language processing and semantic queries to blend structured data from detailed flood models with post-flood event reports.

Access "Models of everywhere revisited: A technological perspective"

Access "Rethinking data-driven decision support in flood risk management for a big data age"



DARE - Data Assimilation for the REsilient city

Partners: Reading University

We are working with Professor Sarah Dance at Reading University who was awarded a Fellowship (EPSRC Senior Fellow in Digital Technology for Living with Environmental Change) and is leading the DARE project – Data Assimilation for the REsilient city.

This project has led to the development of a PhD topic on data assimilation using Earth observation data for 2D flood modelling through the SCENARIO DTP (Doctoral Training Partnership) and with help from our sponsors we are supporting a doctoral research student, Helen Hooker.

Historical chronology of flash flood and hail events

Partners: David Archer, Newcastle University and Reading University

This year, we added a database to our website, produced by David Archer, that lists flash flood events in Britain derived from historical reports dating back over more than 200 years. The aim is to support improved assessments of flash flood risk for a given location and more generally of catchment vulnerability to flash flooding. Flash floods arising from intense rainfall are rare events at a specific location and there may be few if any recent records. A search of a chronology of more than 200 years provides a better basis for assessing the probability of occurrence than the limited observations currently available, especially for surface water floods.



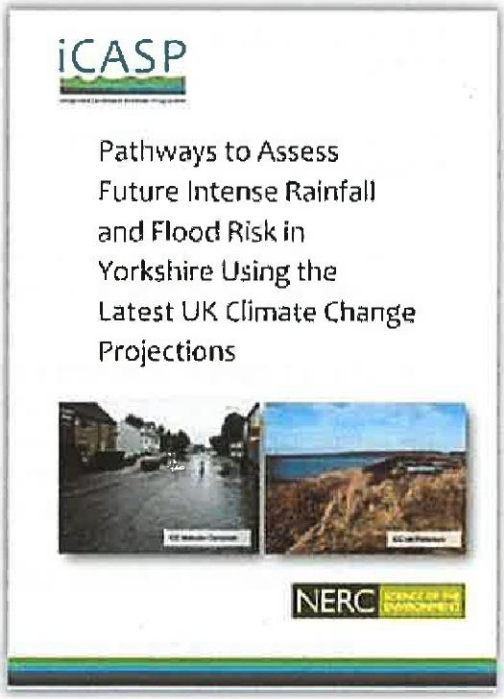
This chronology is a culmination of the "SINATRA" (Susceptibility of catchments to INTense RAinfall and flooding) research project that we worked on with Newcastle and Reading universities and was funded by the UK NERC Flooding from Intense Rainfall programme (the 'early chronology').

Access the British Chronology of Flash Floods

Yorkshire iCASP

Partners: Led by Universities of Leeds, Sheffield and York, with the National Centre for Atmospheric Science. 16 additional 'springboard' partners (including industry, NGOs and government)

iCASP is a 5-year programme that will utilise £4.5m of NERC funding combined with in-kind and delivery support from partners to inform policy, investment decisions and new practice for regional and national agencies focusing on the Ouse catchment.



It aims to build on NERC-funded science in climate change, flooding, integrated catchment management, carbon storage in soils, water quality and water resources to generate economic, societal and environmental benefits in rural and urban areas of Yorkshire. JBA Trust are a 'springboard' partner and sit on the governance panel.

Our technical contribution has focused on supporting the Yorkshire Region Climate Change Forum, providing case studies and guidance for organisations to update existing planning and assessment processes using UKCP18 data.

Access iCASP resources and publications for UK climate projections

Doctoral research projects

Our collaboration with universities across the UK enables us to support graduate researchers (research students) working on doctoral projects to develop advanced skills and deliver high quality research that helps enhance the understanding of a wide range of risks in the environment. We support doctoral researchers through a variety of programmes including doctoral training centres funded by UK Research and Innovation (UKRI).

The projects we supported in 2019-20 are summarised below; more information about each project can be found on the PhD research pages of our website.

Table 1. Summary of doctoral research projects

Topic	Partners	Researcher
Storm clustering and its influence on coastal morphology and defences	University of Southampton, Environment Agency	Luke Jenkins
Enhancing forecasting flood inundation mapping through data assimilation	Reading University	Helen Hooker
Understanding and estimating uncertainty in global flood risk models	Bristol University	Georgios Saralidis
Modelling wave interactions over space and time	Lancaster University	Jake Grainger
Examining the role of habitat quality in determining river ecosystem resilience to extreme flood events	University of Leeds, Environment Agency	Andrew Johnson
Estimating flood frequency using documentary and floodplain sedimentary archives to extend flood series	University of Lincoln, Environment Agency	Josephine Westlake
Methods and tools to communicate climate change and air quality risk	Lancaster Environment Centre	Suzanne van Zuijlen
Hydrodynamically- and ecologically-driven design of weirs, hydropower plants and fish passes	University of Leeds	Tom Padgett
Multi-scale sediment and debris impacts of Natural Flood Management (NFM) measures	University of Leeds	Eleanor Pearson
Impact of woody debris on hydro-geomorphological processes and flood risk	University of Leeds, Yorkshire Dales Rivers Trust	Zora Van Leeuwen
Impact of a Water Level Management Plan on the Humberhead Wetlands	Edinburgh University, Natural England	Ashley Buchan

As our programme matures, the graduate researchers we have supported are completing their work and generating research outputs.

This year, for example, working with the Fluid Dynamics Centre for Doctoral Training (CDT) at the University of Leeds, we supported PhD student Tom Padgett to develop a modelling tool to optimise weir, fish pass and hydro-electric power (HEP) plant configurations for given river discharge regime and channel dimensions. Tom's paper was published in the Royal Society Open Science journal in January 2020.

Access journal paper on using computational fluid dynamics to improve fish pass design


ROYAL SOCIETY OPEN SCIENCE

Individual-based model of juvenile eel movement parametrized with computational fluid dynamics-derived flow fields informs improved fish pass design

Publication summary 2019-20

During the year, we supported and co-authored studies published as papers in peer-reviewed scientific journals. The peer review process can be lengthy, and so some of these papers report on research activity carried out in previous years.

Table 2. Summary of papers published in 2019-20

Title	Journal	Authors	Status
Individual-based model of juvenile eel movement parametrized with computational fluid dynamics-derived flow fields informs improved fish pass design	Royal Society Open Science	Padgett T.E., Thomas R.E., Borman D.J., Mould D.C.	Published
Models of Everywhere Revisited: A Technological Perspective	Environmental Modelling and Software	Blair, G, Beven, K, Lamb, R, Bassett, R, Cauwenberghs, K, Hankin, B, Dean, G, Hunter, N, Edwards, L, Nundloll, V, Samreen, F, Simm, W & Towe, R	Published
Rethinking data-driven decision support in flood risk management for a big data age	Journal of Flood Risk Management	Towe, R, Dean, G, Edwards, L, Nundloll, V, Blair, G, Lamb, L, Hankin, H, Manson, S.	Published
Developing observational methods to drive future hydrological science: Can we make a start as a community?	Hydrological Processes	Beven, K., Asadullah, A., Bates, P., Blyth, E., Chappell, N., Child, S., Cloke, H., Dadson, S., Everard, N., Fowler, H. J., Freer, J., Hannah, D. M., Heppell, K., Holden, J., Lamb, R., Lewis, H., Morgan, G., Parry, L., & Wagener, T.	Published
A risk-based network analysis of distributed in-stream leaky barriers for flood risk management	Natural Hazards and Earth System Sciences	Hankin, B., Hewitt, I., Sander, G., Danieli, F., Formetta, G., Kamilova, A., Kretzschmar, A., Kiradjiev, K., Wong, C., Pegler, S., Lamb, R.	Published Code and data SI on JBA Trust GitLab site
Modelling the Clustering of Extreme Events for Short-Term Risk Assessment	J. Agricultural, Biological and Environmental Statistics	Towe, R., Tawn, J., Eastoe, E., Lamb, R.	Published
Third UK Climate Change Risk Assessment (CCRA3): Future flood risk	Committee on Climate Change, London	Sayers, P., Horritt, M., Carr, S., Kay, A.L., Mauz, J., Lamb, R., Penning-Rowsell, E.	Published



3 Support for students in higher education

There are many academic subjects that touch upon our core interests in environmental risks and resources. Whilst undergraduate courses such as Geography and Environmental or Physical Sciences are important, the relevant specialist training often comes into greater focus at postgraduate (masters or doctoral) level. JBA Trust therefore emphasises support for students and projects at this level.

Masters projects

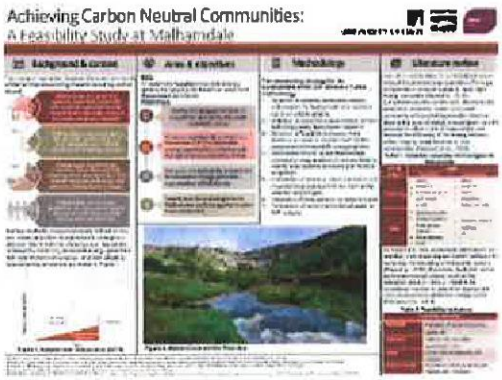
JBA Trust helps provide students with placements, technical expertise and access to software resources and case study data, as well as offering a platform for them to share highlights from their research projects. The students we help have gained insight into how methodologies and techniques are applied in industry and have an opportunity to see how they will be able to use their skills in a future career.

In 2019-20, the JBA Trust helped five students from the Universities of Nottingham and Leeds. The students worked with support from our colleagues in the JBA Group of companies on these MRes and MSc projects:

- Achieving Carbon Neutral Communities: A Feasibility Study at Malhamdale
- Channel capacity estimation
- Developing a PARM simulator to explore how online tools can improve understanding of flood risk
- Characterising and Design of Runoff Attenuation Features
- Rewilding in the English landscape: Appraising the benefits

We also support the dissemination and publication of the students' research.

Poster summaries of the MSc projects are available on our MSc Research webpages.



The British Hydrological Society, JBA Trust and Environment Agency Studentship Awards

In 2019-20 we continued our partnership with the British Hydrological Society (BHS) and the Environment Agency to support students working towards MSc qualifications in hydrology, water resources, catchment management and other related subjects. Twelve bursaries of £1,500 were awarded and we have now supported 77 students since 2011.



Applications for these bursaries were managed using the web-based system that we developed in 2014 and have maintained since. This continued to work well and enabled us to coordinate the assessment process with the BHS and Environment Agency effectively.

Flood and Coastal Risk Management Scholarships

The challenges of more frequent extreme weather and new flood risk responsibilities mean that there is a growing need for skilled water and environmental risk management professionals. This year we continued to provide support through our scholarships to fully fund the tuition fees for Lancaster University's Flood and Coastal Risk Management Postgraduate Certificate course.

Congratulations to Daniel Turner, a Project Officer at the Yorkshire Dales Rivers Trust, who successfully completed his PGCert this year. Recipients of the scholarship since 2014 are:

- Will Barber, Flood Risk Engineering & Strategy Officer, Coventry City Council
- Michelle Fitzpatrick, engineer at the Vale of Glamorgan Council
- Vikki Teasdale, Senior SuDS Officer at Buckinghamshire County Council
- Allison Chapman, Flood Risk Engineer at Wirral Council
- Daniel Turner, Project Officer at the Yorkshire Dales Rivers Trust
- Peter Burrows, Development Engineer (SuDS) at Gateshead Council
- Faye Tomalin, Engineering Assistant in Flood and Coastal Risk Management at the Vale of Glamorgan Council
- Robin Gray, Pennine Prospects
- Stuart Edwards, North Yorkshire County Council



4 Building our reach and enabling knowledge exchange

Website

Our website enables people to easily access all our publications and educational resources, as well as find information about the Trust and our research projects. Our present website (www.jbatrust.org) launched in April 2016. It continues to help us deliver our charitable objectives of sharing best practice and supporting training and education.

Over 10,000 users visited the website in 2019-20 and we received an average of between one and two enquiries a week through the website about research support, our physical models, bursaries and scholarships and support for educational activities and events.

Social media

We use Twitter to publicise research outputs, new resources, publications or scholarships and awards. The number of @JBATrust followers is steadily growing and by the end of 2019-20 we had 777 followers. This year we also started a new Twitter account @JBATrustWeather that we use to share updates from our weather station based at Broughton Park.

YouTube channel

JBA Trust's YouTube channel hosts all our video resources. Since January 2020, the number of subscribers has increased from 12.5k to 37.1k. This year we uploaded new videos of the hydraulic flume with a comprehensive commentary on how engineered structures affect flow in rivers. The full-length flume video had nearly 2 million views in 2019-20.

We also uploaded a time-lapse of the new weather station, a video of the Skipton PARM and a new AR sandbox video.

To coincide with the first Central American World Bank/GFDRR "Understanding Risk" conference in Costa Rica, we created Spanish versions of the new videos, with translation subtitles for the flume, wave tank, PARM and sandbox videos.



In 2019-20 we started to create a series of short careers videos to help inspire young people and to provide an insight into environmental science and engineering career opportunities. The first in our series of 'Careers for our Future Climate' videos was posted in October 2020 and will be of particular use for online career fairs.

The wave tank video continues to be very popular with over 6.9 million views since it was posted in November 2016. We have received feedback that it is being used as a resource to support the Geography GCSE AQA curriculum. The original hydraulic flume video has also proved popular with over 230,00 views since 2016.

Global reach

This year we responded to over 54 requests from around the world for support and assistance from people who, having seen our physical model and weather station resources, would like to build their own or set up their own educational project. The contacts came through social media or our website contact us pages.

By sharing factsheets and detailed specifications for our models, we aim to enable people to create their own educational resources to support their communities and raise awareness of flood risk management. In some cases, we have established an on-going dialogue with people who have approached us to help them with their own projects. We have helped high school and college students, university researchers, teachers and private individuals. The number of contacts relating to our physical models and weather station are shown below.



We were also able to track the impact of some of our published research outputs, including a paper on 'Vulnerability of bridges to scour: insights from an international expert elicitation workshop' published in 2017.

Globally, the paper has been viewed 2,062 times, with 996 views in the United States of America, 196 in Germany, 172 in the UK and 160 in China and 76 in Canada. The paper has been referenced in published research 13 times.

5 Directors and trustees

The Trustees serving during the year were as follows:

Trustees	Rob Lamb, JBA	(Managing Director of JBA Trust)
	Jeremy Benn, JBA	
	Jim Hall, University of Oxford	
	Keith Beven, Lancaster University	
	Nick Russell, Independent financial consultant	
Secretary	Craig Robson	

6 Structure, governance and management

JBA Trust is a company limited by guarantee and is governed by its Memorandum and Articles of Association. It was incorporated on 9 November 2011.

The trustees review the activities of JBA Trust every six months to ensure that they are focussed on supporting the purpose of the charity. The review also considers the strategic direction of the charity and considers how planned activities will contribute to public benefit.

We have referred to the guidance contained in the Charity Commission's general guidance on public benefit when reviewing our aims and objectives and in planning our future activities.

Appointment of trustees

On incorporation of the JBA Trust, the Board of Trustees was appointed by invitation.

To preserve independence of the JBA Trust from JBA Group companies, which provide part of its core funding, the JBA Trust's Articles of Association stipulate that the number of trustees connected to or employed by JBA Group shall always be less than half of the total number of trustees appointed at any given time.

The trustees are not remunerated (other than payment to cover travel and accommodation costs where required for JBA Trust business).

Trustee induction and training

Periodically, the trustees meet and are briefed on their legal obligations under charity and company law, updates to the Charity Commission's guidance on public benefit, the content of the Memorandum and Articles of Association and the JBA Trust business plan.

Organisation

The Board of Trustees meets every six months and is responsible for the strategic direction and policy of the charity. A Managing Director is appointed by the trustees to manage the day-to day operations of the charity and is supported by a Programme Manager.

Risk management

The trustees have a risk management strategy which comprises:

- An annual review of the risks the charity may face
- Policies and procedures in place to mitigate those risks
- Plans in place to minimise the impact of the risks should they materialise.

The principal risk to JBA Trust is financial sustainability. This is mitigated by having a robust reserves policy and a clear financial plan which is reviewed and subsequently approved by the trustees at the start of the financial year.

JBA Trust adopts policies and procedures from our host, the JBA Group, which are externally validated where applicable. These include policies on: Health and Safety; Energy Use; Environment; Sustainability; Social Responsibility; Equality and Diversity.

7 Financial review

The principal funding source for JBA Trust is JBA Group dividends. JBA Trust also aims to leverage funding for research projects by supporting partners in applying for funding from external organisations, for example Innovate UK or Research Councils. We also generate a small amount of additional income from hiring out our physical models to commercial organisations (no charges are made for educational or charitable activities). Personal donations are processed through an online giving platform that enables Gift Aid to be claimed efficiently.

Reserves Policy

Reserves are required to minimise the financial risks associated with the unlikely event of unplanned or unforeseen expenditure. The JBA Trust maintains sufficient reserves to cover all contractually committed expenditure or liabilities and operating costs for one year.

Plan for future periods

JBA Trust anticipates continued long-term funding from JBA Group. To ensure that the charity maximises the value of its income in carrying out its activities, the strategic plan focuses on continuing to seek match funding for research projects from funding bodies, including Universities and Research Councils. In the future JBA Trust may also wish to generate an income by licensing datasets, results or models generated by research.

The trustees declare that they have approved the Trustees Report above.

On behalf of the trustees

Rob Lamb, Managing Director of JBA Trust 

13 May 2021

GOING CONCERN

During March 2020 the global pandemic COVID-19 outbreak has had a significant impact on the worldwide economy. The trustees are aware of the effects that this may continue to have on the company and will continue to review and adopt the suitable operational strategies in order to safeguard the business for the ensuing 12 months.

The financial statements have been prepared on the going concern basis. This is based on the continued financial support of its trustees and creditors.

TRUSTEES' RESPONSIBILITIES STATEMENT

The Trustees (who are also directors of JBA Trust Limited for the purposes of company law) are responsible for preparing the Trustees' report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

Company law requires the Trustees to prepare financial statements for each financial year. Under company law the Trustees must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the charitable company and of the incoming resources and application of resources, including the income and expenditure, of the charitable company for that period. In preparing these financial statements, the Trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP;
- make judgments and accounting estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue in operation.

The Trustees are responsible for keeping adequate accounting records that are sufficient to show and explain the charitable company's transactions and disclose with reasonable accuracy at any time the financial position of the charitable company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

This report was approved by the Trustees, on 13 May 2021 and signed on their behalf by:

Rob Lamb, Managing Director of JBA Trust

JBA TRUST LIMITED

(A company limited by guarantee)

INDEPENDENT EXAMINER'S REPORT FOR THE YEAR ENDED 31 OCTOBER 2020

INDEPENDENT EXAMINER'S REPORT TO THE TRUSTEES OF JBA TRUST LIMITED (the 'company')

I report to the charity Trustees on my examination of the accounts of the company for the year ended 31 October 2020.

This report is made solely to the company's Trustees, as a body, in accordance with Part 4 of the Charities (Accounts and Reports) Regulations 2008. My work has been undertaken so that I might state to the company's Trustees those matters I am required to state to them in an Independent examiner's report and for no other purpose. To the fullest extent permitted by law, I do not accept or assume responsibility to anyone other than the company and the company's Trustees as a body, for my work or for this report.

RESPONSIBILITIES AND BASIS OF REPORT

As the Trustees of the company (and its directors for the purposes of company law) you are responsible for the preparation of the accounts in accordance with the requirements of the Companies Act 2006 ('the 2006 Act').

Having satisfied myself that the accounts of the company are not required to be audited under Part 16 of the 2006 Act and are eligible for independent examination, I report in respect of my examination of the company's accounts carried out under section 145 of the Charities Act 2011 ('the 2011 Act'). In carrying out my examination I have followed the Directions given by the Charity Commission under section 145(5)(b) of the 2011 Act.

INDEPENDENT EXAMINER'S STATEMENT

I have completed my examination. I can confirm that no matters have come to my attention in connection with the examination giving me cause to believe:

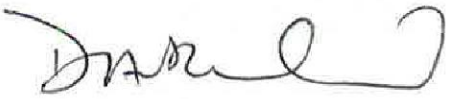
1. accounting records were not kept in respect of the company as required by section 386 of the 2006 Act; or

2. the accounts do not accord with those records; or

3. the accounts do not comply with the accounting requirements of section 396 of the 2006 Act other than any requirement that the accounts give a 'true and fair' view which is not a matter considered as part of an independent examination; or

4. the accounts have not been prepared in accordance with the methods and principles of the Statement of Recommended Practice for accounting and reporting by charities [applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102).

I have no concerns and have come across no other matters in connection with the examination to which attention should be drawn in this report in order to enable a proper understanding of the accounts to be reached.

Signed:  Dated: 13 May 2021

David Richmond FCA

Armstrong Watson Audit Limited
Number 3
Acorn Business Park
Airedale Business Centre
Skipton
North Yorkshire
BD23 2UE

JBA TRUST LIMITED

(A company limited by guarantee)

STATEMENT OF FINANCIAL ACTIVITIES INCORPORATING INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 OCTOBER 2020

	Note	Unrestricted funds 2020 £	Total funds 2020 £	*Total funds* 2019 £
INCOME FROM:				
Donations and legacies	2	**181,341**	**181,341**	201,250
Investments	3	**60**	**60**	1,987
TOTAL INCOME		**181,401**	**181,401**	203,237
EXPENDITURE ON:				
Raising funds		**-**	**-**	745
Charitable activities	4,6,5	**159,446**	**159,446**	225,475
TOTAL EXPENDITURE		**159,446**	**159,446**	226,220
NET INCOME / (EXPENDITURE) BEFORE OTHER RECOGNISED GAINS AND LOSSES		**21,955**	**21,955**	(22,983)
NET MOVEMENT IN FUNDS		**21,955**	**21,955**	(22,983)
RECONCILIATION OF FUNDS:				
Total funds brought forward		**277,339**	**277,339**	300,322
TOTAL FUNDS CARRIED FORWARD		**299,294**	**299,294**	277,339

The notes on pages 6 to 13 form part of these financial statements.

JBA TRUST LIMITED

(A company limited by guarantee)
REGISTERED NUMBER: 07840801

BALANCE SHEET
AS AT 31 OCTOBER 2020

	Note	£	2020 £	£	2019 £
FIXED ASSETS					
Tangible assets	9		**8,884**		13,836
CURRENT ASSETS					
Debtors	10	**51,780**		10,778	
Cash at bank and in hand		**250,362**		258,939	
		302,142		269,717	
CREDITORS: amounts falling due within one year	11	**(11,732)**		(6,214)	
NET CURRENT ASSETS			**290,410**		263,503
NET ASSETS			**299,294**		277,339
CHARITY FUNDS					
Unrestricted funds	12		**299,294**		277,339
TOTAL FUNDS			**299,294**		277,339

The company's financial statements have been prepared in accordance with the provisions applicable to companies subject to the small companies regime.

The Trustees consider that the company is entitled to exemption from the requirement to have an audit under the provisions of section 477 of the Companies Act 2006 ("the Act") and members have not required the company to obtain an audit for the year in question in accordance with section 476 of the Act.

The Trustees acknowledge their responsibilities for complying with the requirements of the Companies Act 2006 with respect to accounting records and the preparation of financial statements.

The financial statements have been prepared in accordance with the provisions applicable to companies subject to the small companies regime and in accordance with the provisions of FRS 102 Section 1A - small entities.

The financial statements were approved and authorised for issue by the Trustees on 13 May 2021 and signed on their behalf, by:

R Lamb
Director

The notes on pages 25 to 32 form part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2020

1. ACCOUNTING POLICIES

1.1 Basis of preparation of financial statements

The financial statements have been prepared in accordance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) - (Charities SORP (FRS 102)), the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Companies Act 2006.

JBA Trust Limited meets the definition of a public benefit entity under FRS 102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy.

The principal activity of the company is to enhance understanding and management of risks in the water environment by enabling research, education and training.

The company is a company limited by guarantee incorporated and domiciled in the United Kingdom.

These financial statements have been presented in Pound Sterling as this is the currency of the primary economic environment in which the company operates.

1.2 Company status

The company is a company limited by guarantee. The members of the company are the Trustees named on page 1. In the event of the company being wound up, the liability in respect of the guarantee is limited to £10 per member of the company.

1.3 Going concern

During March 2020 the global pandemic COVID-19 outbreak has had a significant impact on the worldwide economy. The trustees are aware of the effects that this may continue to have on the company and will continue to review and adopt the suitable operational strategies in order to safeguard the business for the ensuing 12 months.

The financial statements have been prepared on the going concern basis. This is based on the continued financial support of its trustees and creditors.

The financial statements do not include any adjustment that would result in the withdrawal of this support.

1. ACCOUNTING POLICIES (continued)

1.4 Income

All income is recognised once the company has entitlement to the income, it is probable that the income will be received and the amount of income receivable can be measured reliably.

Donated services or facilities are recognised when the company has control over the item, any conditions associated with the donated item have been met, the receipt of economic benefit from the use of the company of the item is probable and that economic benefit can be measured reliably. In accordance with the Charities SORP (FRS 102), the general volunteer time of the Friends is not recognised and refer to the Trustees' report for more information about their contribution.

On receipt, donated professional services and donated facilities are recognised on the basis of the value of the gift to the company which is the amount the company would have been willing to pay to obtain services or facilities of equivalent economic benefit on the open market; a corresponding amount is then recognised in expenditure in the period of receipt.

Income tax recoverable in relation to donations received under Gift Aid or deeds of covenant is recognised at the time of the donation.

Income tax recoverable in relation to investment income is recognised at the time the investment income is receivable.

1.5 Expenditure

Expenditure is recognised once there is a legal or constructive obligation to transfer economic benefit to a third party, it is probable that a transfer of economic benefits will be required in settlement and the amount of the obligation can be measured reliably. Expenditure is classified by activity. The costs of each activity are made up of the total of direct costs and shared costs, including support costs involved in undertaking each activity. Direct costs attributable to a single activity are allocated directly to that activity. Shared costs which contribute to more than one activity and support costs which are not attributable to a single activity are apportioned between those activities on a basis consistent with the use of resources. Central staff costs are allocated on the basis of time spent, and depreciation charges allocated on the portion of the asset's use.

Support costs are those costs incurred directly in support of expenditure on the objects of the company and include project management carried out at Headquarters. Governance costs are those incurred in connection with administration of the company and compliance with constitutional and statutory requirements.

Costs of generating funds are costs incurred in attracting voluntary income, and those incurred in trading activities that raise funds.

Charitable activities and Governance costs are costs incurred on the company's educational operations, including support costs and costs relating to the governance of the company apportioned to charitable activities.

Grants payable are charged in the year when the offer is made except in those cases where the offer is conditional, such grants being recognised as expenditure when the conditions attaching are fulfilled. Grants offered subject to conditions which have not been met at the year end are noted as a commitment, but not accrued as expenditure.

1. ACCOUNTING POLICIES (continued)

1.6 Tangible fixed assets and depreciation

A review for impairment of a fixed asset is carried out if events or changes in circumstances indicate that the carrying value of any fixed asset may not be recoverable. Shortfalls between the carrying value of fixed assets and their recoverable amounts are recognised as impairments. Impairment losses are recognised in the Statement of financial activities incorporating income and expenditure account.

Tangible fixed assets are carried at cost, net of depreciation and any provision for impairment. Depreciation is provided at rates calculated to write off the cost of fixed assets, less their estimated residual value, over their expected useful lives on the following bases:

Plant and machinery	-	25% straight line
Motor vehicles	-	25% straight line
Equipment	-	25% straight line

1.7 Interest receivable

Interest on funds held on deposit is included when receivable and the amount can be measured reliably by the company; this is normally upon notification of the interest paid or payable by the Bank.

1.8 Debtors

Trade and other debtors are recognised at the settlement amount after any trade discount offered. Prepayments are valued at the amount prepaid net of any trade discounts due.

1.9 Cash at Bank and in hand

Cash at bank and in hand includes cash and short term highly liquid investments with a short maturity of three months or less from the date of acquisition or opening of the deposit or similar account.

1.10 Liabilities and provisions

Liabilities are recognised when there is an obligation at the Balance sheet date as a result of a past event, it is probable that a transfer of economic benefit will be required in settlement, and the amount of the settlement can be estimated reliably. Liabilities are recognised at the amount that the company anticipates it will pay to settle the debt or the amount it has received as advanced payments for the goods or services it must provide. Provisions are measured at the best estimate of the amounts required to settle the obligation. Where the effect of the time value of money is material, the provision is based on the present value of those amounts, discounted at the pre-tax discount rate that reflects the risks specific to the liability. The unwinding of the discount is recognised within interest payable and similar charges.

1.11 Fund accounting

General funds are unrestricted funds which are available for use at the discretion of the Trustees in furtherance of the general objectives of the company and which have not been designated for other purposes.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2020

2. INCOME FROM DONATIONS AND LEGACIES

	Unrestricted funds 2020 £	Total funds 2020 £	*Total funds 2019 £*
Donations	**116,193**	**116,193**	126,050
Donated services	**60,245**	**60,245**	66,325
Sales	**4,903**	**4,903**	8,725
Flume income	**-**	**-**	150
Total donations and legacies	**181,341**	**181,341**	201,250
Total 2019	201,250	201,250	

Donated services are provided by the trading subsidiaries of JBA Group Limited and are valued at standard chargeable rates.

3. INVESTMENT INCOME

	Unrestricted funds 2020 £	Total funds 2020 £	*Total funds 2019 £*
Interest received	**60**	**60**	1,987
Total 2019	1,987	1,987	

4. ANALYSIS OF GRANTS

	Grants to Institutions 2020 £	Grants to Support Activities 2020 £	Total 2020 £	*Total 2019 £*
Grants, Activities undertaken	**14,048**	**92,283**	**106,331**	148,142
Total 2019	27,820	120,322	148,142	

	2020 £	2019 £
Grants to institutions	**14,048**	27,820
Research projects	**32,262**	49,784
Project pipeline development	**20,228**	10,304
Training projects	**39,793**	41,131
Seminars	**-**	19,103
Total	**106,331**	148,142

5. SUPPORT COSTS

	Activities undertaken £	Total 2020 £	Total 2019 £
Sub-Contractors associates	**11,900**	**11,900**	43,531
Sundry expenses	**1,580**	**1,580**	2,142
Sub-Contractors other	**-**	**-**	1,397
Communication and website	**25,547**	**25,547**	5,967
Computer consumables and software licences	**452**	**452**	343
Motor and travel expenses	**2,057**	**2,057**	7,610
Office costs	**3,880**	**3,880**	606
Insurance	**509**	**509**	494
Legal and professional	**13**	**13**	13
Depreciation	**4,952**	**4,952**	12,504
	50,890	**50,890**	74,607
Total 2019	74,607	74,607	

6. GOVERNANCE COSTS

	Unrestricted funds 2020 £	Total funds 2020 £	*Total funds* 2019 £
Accountancy fees	**2,202**	**2,202**	2,700
Bank charges	**23**	**23**	27
	2,225	**2,225**	2,727

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 OCTOBER 2020

7. NET INCOME/(EXPENDITURE)

This is stated after charging:

	2020 £	2019 £
Depreciation of tangible fixed assets:		
- owned by the charity	4,952	12,504

During the year, no Trustees received any remuneration (2019 - £NIL).
During the year, no Trustees received any benefits in kind (2019 - £NIL).
During the year, no Trustees received any reimbursement of expenses (2019 - £NIL).

8. EMPLOYEES

The company has no employees other than the Trustees, in both the current and previous year.

9. TANGIBLE FIXED ASSETS

	Plant and machinery £	Motor vehicles £	Equipment £	Total £
Cost				
At 1 November 2019 and 31 October 2020	37,189	20,100	1,607	58,896
Depreciation				
At 1 November 2019	23,659	20,100	1,301	45,060
Charge for the year	4,670	-	282	4,952
At 31 October 2020	28,329	20,100	1,583	50,012
Net book value				
At 31 October 2020	8,860	-	24	8,884
At 31 October 2019	13,530	-	306	13,836

10. DEBTORS

	2020 £	2019 £
Trade debtors	350	-
Other debtors	51,430	10,778
	51,780	10,778

11. CREDITORS: Amounts falling due within one year

	2020 £	2019 £
Trade creditors	9,092	3,574
Accruals and deferred income	2,640	2,640
	11,732	6,214

12. STATEMENT OF FUNDS

STATEMENT OF FUNDS - CURRENT YEAR

	Balance at 1 November 2019 £	Income £	Expenditure £	Balance at 31 October 2020 £
Unrestricted funds				
General Funds	277,339	181,401	(159,446)	299,294

STATEMENT OF FUNDS - PRIOR YEAR

	Balance at 1 November 2018 £	*Income* £	*Expenditure* £	*Balance at 31 October 2019* £
General Funds	300,322	203,237	(226,220)	277,339

13. ANALYSIS OF NET ASSETS BETWEEN FUNDS

ANALYSIS OF NET ASSETS BETWEEN FUNDS - CURRENT YEAR

	Unrestricted funds 2020 £	Total funds 2020 £
Tangible fixed assets	8,884	8,884
Current assets	302,142	302,142
Creditors due within one year	(11,732)	(11,732)
	299,294	299,294

13. ANALYSIS OF NET ASSETS BETWEEN FUNDS (continued)

ANALYSIS OF NET ASSETS BETWEEN FUNDS - PRIOR YEAR

	Unrestricted funds 2019 £	*Total funds* 2019 £
Tangible fixed assets	13,836	13,836
Current assets	269,717	269,717
Creditors due within one year	(6,214)	(6,214)
	277,339	277,339

14. RELATED PARTY TRANSACTIONS

Included within debtors, amounts falling due within one year is an amount of £51,427 (2019 - £10,744) due from JBA Risk Management Limited. During the year, donations were received from JBA Risk Management Limited of £57,600 (2019 - £123,174).

During the year, donated services were received from Jeremy Benn Associates Limited of £118,607 (2019 - £66,325).

Both JBA Risk Management Limited and Jeremy Benn Associates Limited are under common control by virtue of the shareholdings and trusteeship of J R Benn.