



INTRODUCTION

HELLO FROM HEIDI

Innovation Festival 2024 was an experience that needed to be seen to be believed – and it was fantastic that over 3,000 people were able to do just that in person in July.

However, if you weren't able to make it in person then this little insight should give you just a flavour of what our incredible event is all about, and what huge things went down in such a short week.

Now, at the beginning of Innovation Festival, way back in 2016, the event came from very humble beginnings – as those of you who were there will remember, we were small but mighty.

Just six sprints in one small corner of Newcastle Racecourse and with less than 1000 innovators on site with us. Now fast forward to this year and to the ginormous and action-packed event that practically consumed every nook and cranny of the same venue.

The theme for IF24 was "Speed and Scale", which is something we unintentionally carried throughout every year of doing the event – by trebling it in size!

This year in particular was all about growing ideas at an exponential rate and making them as impactful as possible.

In this handy summary, you'll hear some record-breaking statistics about how our event exceeded even our high expectations and how we have generated more ideas than ever before - but before all that some thank you's from me.

Firstly, a thank you to all of our sponsors, without whom the Innovation Festival wouldn't even exist.

Thank you for supporting us, for sharing your expert insights and for helping us to make it the best year ever.

Secondly, a thank you to all of our volunteers and crew, who worked tirelessly to ensure that everything went smoothly despite the challenges thrown at us (mainly the unpredictable weather!)

Finally, and most importantly, thank you to all of our amazing attendees who brought the energy, ideas, and made the festival as special as it was.

And so, as we close the doors on our eighth Innovation Festival, we want to be remembered as the people who changed the water industry.

We want to be remembered as the people who did the important things, while working at speed and at scale.

Please, make sure you come along and join us next year – we're not just saying it, nothing beats the real thing. With almost 300 ideas being progressed from this year, we can assure you that nothing beats the feeling of being part of something huge.

So, once you've finished reading then make sure you sign up to our Innovation Connect newsletter, which will keep you up to date on how you can sign up for next year's event.

See you there!



HEIDI MOTTRAM

CHIEF EXECUTIVE OFFICER
NORTHUMBRIAN WATER GROUP

THE TIMELINE

OUR FIRST FESTIVAL: 939 attendees gather for the first time at Newcastle Racecourse.

The first Innovation Festival project was brought to life as the moss tree is put up in Newcastle.

BRIGHT IDEAS FOR A BETTER TOMORROW: The festival literally doubles in size.

The idea for the National Underground Asset Register (NUAR) is born.

2017

2018



BUILDING BACK BETTER: Covid sees the Innovation Festival go completely digital for the first time.

The festival inspires Innovate East, which takes place with Anglian Water.

GREAT NORTH BY NORTH EAST: The festival officially goes global for the first time, with sprints running through the night.

2020

2019

Entries into the Ofwat breakthrough challenge are drafted and won.

THE BRILLIANT GET TOGETHER: The first hybrid event sees a record-breaking number of attendees and the most extensive celebrities line-up ever!

The UK Government announce they will be rolling out NUAR across the country.

2021

IF 2024: Speed and Scale – NWG's biggest festival in size, number of sprints and on site attendees. Also our first ever Young Citizens Work Experience Festival.

CITIZENS: 2023 saw the festival grow to the next level, with citizens gathering from all over the world.

No-Dig trials taking place across the North East.

UNTAPPED POTENTIAL: The grand return to Newcastle Racecourse, incorporating all of the above.

2024

2023



2022



OUR STORY SO FAR

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Since our first Innovation Festival, we have taken around **250** ideas back into the business and put more than **£2m** back into the local economy.

Some projects have proven more successful than others with the output each year getting stronger now we have honed the festival formula.

As we look back across the 8 years of festival-ing, the resulting projects are testament to the effectiveness of this formula.

We have had over **80 projects** which have had high potential and get evaluated beyond the festival in our innovation pipeline.

On average we have potential impact of **>£100M/year**.

Some of our biggest projects are now coming to fruition, such as the **National Underground Asset Register** worth an estimated £3.2B to the UK and £1M/year to NWG.

Tipping Point, a concrete asset lifespan tool is now being used in the business saving £10M/year in extending the life of this asset type.

No Dig leakage solution is now being widely used across NWG and is estimated to save £500K/year.

Water Cookbook from IF23 is also now ready for use potentially saving £21M/year in design simplification.

In addition, the festival gives rise to Ofwat innovation fund bid ideas and we have had a lot of success securing £6M for 4 projects – **FairWater**, **Support For All**, **Treatment to Tap** and **Smart Powered Hydrometer**.

Click [here](#) to find out more.



OFWAT FUNDING

The Innovation Festival is a hot bed for brilliant Ofwat Innovation Fund ideas.

Northumbrian Water Group (NWG) has submitted **16 winners** within the Ofwat Water Breakthrough Challenge. We are also taking part in **11 further Ofwat funded projects**, led by other water companies, as a supporting partner

After four rounds of the Water Breakthrough Challenge, NWG has won funding amounting to a total of **£29,107,302**, with **8 Catalyst projects** amounting to **£10,068,208** and **4 Transform projects** amounting to **£19,039,094**.

16 winners
within the Ofwat Water Breakthrough Challenge



Supporting other water companies in
11 projects



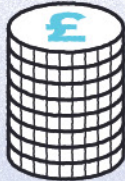
£29,107,302

11 Catalyst
projects



£10,068,208

5 Transform
projects



£19,039,094

2024 IN NUMBERS



Attendees

3131



NW/ESW
Employees

800



Countries

37



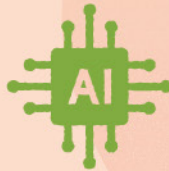
Sprint Leads

113



Sprints, hacks
and dashes

50



AI Tools
Applied

6



Years of work
completed at festival

54



Sectors

45



Organisations

>650



Sponsors

97



Universities

39



Young People

>670



Guest Speakers
and Acts

11



Music Acts

6



Water
Companies

21



Olympians

5



STEM Activities

WHOLE FESTIVAL!



Living Well
Activities

16



Media Reach

1.1M



Socail Media
Reach

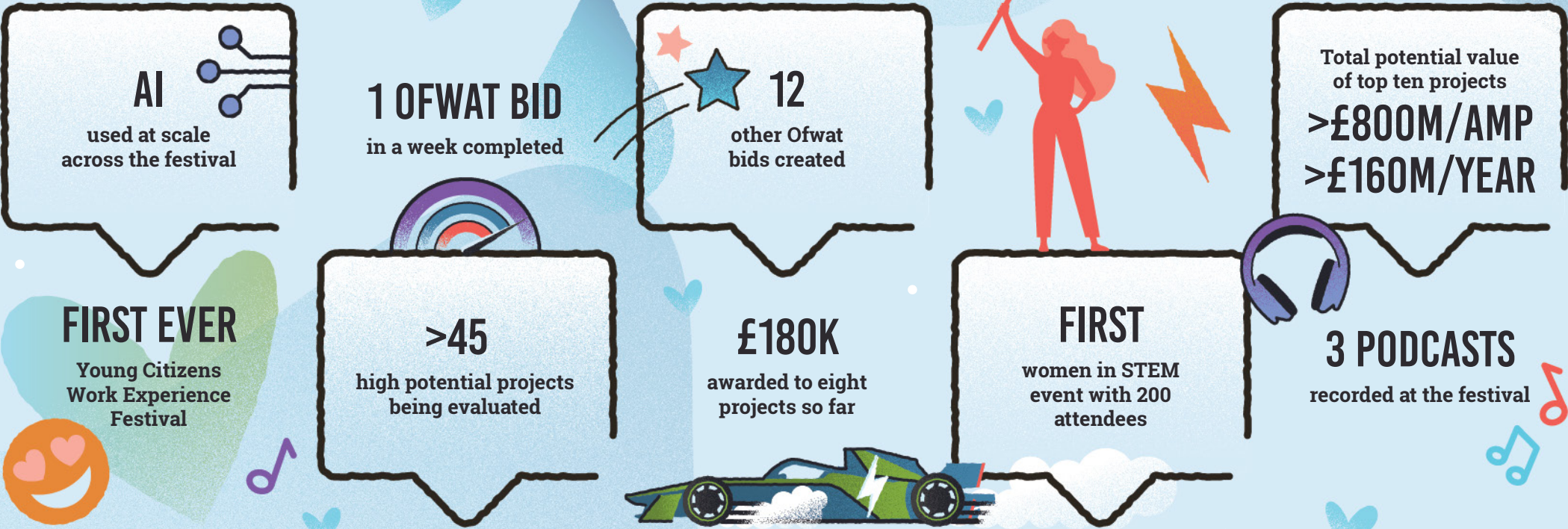
5.3M



Social Media
Engagement

11.8K

FUN FACTS



Across all 8 festivals we have had:

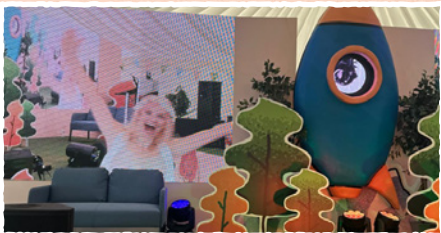


A GLIMPSE INTO INNOVATION FESTIVAL 2024

Our festivals need to be seen to be believed, and while we haven't yet got a time machine to transport you back to the summer of 2024, you can see what it was all about by **watching these videos...**

DAY 1

Understand



DAY 2

Sketch



DAY 3

Define



DAY 4

Prototype and validate



...or by diving into this **3D mapped world** of the whole festival site, cleverly created by **Matterport**.



STAR-STUDED SUPPORT

If you've watched the festival highlights videos, there might be a couple of faces in there you recognise.

Our festivals are never short of a celebrity or two, and IF24 was no different.

This year, we were delighted to welcome:

Steve Cram CBE, Track and Field Olympian

In a career spanning over three decades, since appearing as a 17 year old at the Commonwealth Games in 1978, Steve's many achievements include six Gold medals at the Commonwealth Games and the European and World Championships.

Ellie Simmonds OBE, Paralympic Swimmer

'Ellie' Simmonds OBE is one of the world's most celebrated Paralympians and a true golden girl of British sport. A five-time Paralympic Champion and fourteen-time World Champion.

Montell Douglas, Multi-Sports Olympian

Montell is an Olympic Bobsledder and former Team GB Sprinter with a highly decorated sporting career that spans many global events and competitions. In January 2022, Montell made sporting history to become the first female UK athlete to compete at both the Summer and Winter Olympic Games.

Harry Aikines-Aryeetey, Olympic Sprinter

A Commonwealth and World gold medallist, Harry is an elite athlete who excels in sprinting. He has competed at the highest level in the UK since his youth. At age 17, he won BBC Young Sports Personality of the Year after becoming the first athlete to win gold medals at both 100 and 200 metres at the World Youth Championships.

Dr Willard Wigan MBE, Sculptor

Whilst hiding at home from the world that taunted him, Willard discovered his hidden talent and began a new journey to greatness. Willard would show the world that nothing exists and small things could become everything.

Mandy Hickson, RAF Fast-Jet Pilot

Mandy Hickson was the only female pilot on her Front Line Tornado Squadron, flying multimillion pound fast-jets for the Royal Air Force. She has operated in hostile environments, including patrolling the 'No Fly' zone over Iraq.



ONES TO WATCH

More than **45 high potential projects** were born at IF24. They are now being evaluated and while not all of them will necessarily be progressed, these projects have the potential to contribute to a total value of more than **£100 million/year** for Northumbrian Water over the next five years.

These include:

SPEED

- ★ **GENAI: ACCELERATING WATER TREATMENT INNOVATION**
TCS
- ★ **DRONING ON ABOUT WATER QUALITY**
Makutu, Microsoft, RS Hydro and Skyports
- ★ **ERASE AND REWIND**
Northumbrian Water Group
- ★ **ESSENTIALS ASSEMBLE - NATIONAL UNIFIED ALERT SERVICE**
Esri UK
- ★ **BUILDING TOMORROW, FASTER TODAY!**
Mott MacDonald Bentley

SCALE

- ★ **TREATMENT TO TAP**
Siemens
- ★ **NO DIG**
Origin Tech
- ★ **MOWBI/TOWBI IN THE NORTH**

- ★ **WATER TREATMENT WORKS OF THE FUTURE**
Suez
- ★ **BIO STREAM**
Jacobs, Stantec and Royal HaskoningDHV
- ★ **WISDOM**
Costain and WSP
- ★ **TRUSTTEES**
Ordnance Survey
- ★ **NE WATER FUTURE SKILLS CENTRE**
Northumbria University

- ★ **SAFETY CHECKS FREE TO ALL**
Vyntelligence
- ★ **SMART SEWERS**

WISTEM EVENT

The first WiSTEM Event held at Innovation Festival 2024 was sponsored by Project Groundwater Northumbria and focussed on speed, scale, and empowering employees to enhance productivity and attract top talent. The event highlights the need for gender balance and support mechanisms in the water sector, featuring keynote speaker Dani Wallace and a panel discussion on extending the influence and impact of networks. The event inspired, empowered, and created meaningful connections that we drive positive change in the industry.

★ 200 ATTENDEES

★ 1 QUEEN BEE

★ 8 PANELLISTS

★ HUNDREDS OF BOOK RECOMMENDATIONS SHARED

Invisible Women Caroline Criado Perez

Lift as You Climb Viv Groskop

She Speaks Yvette Cooper

The Authority Gap Mary Ann Sieghart

Dare to Lead Brene Brown

How Women Rise Sally Helgesen

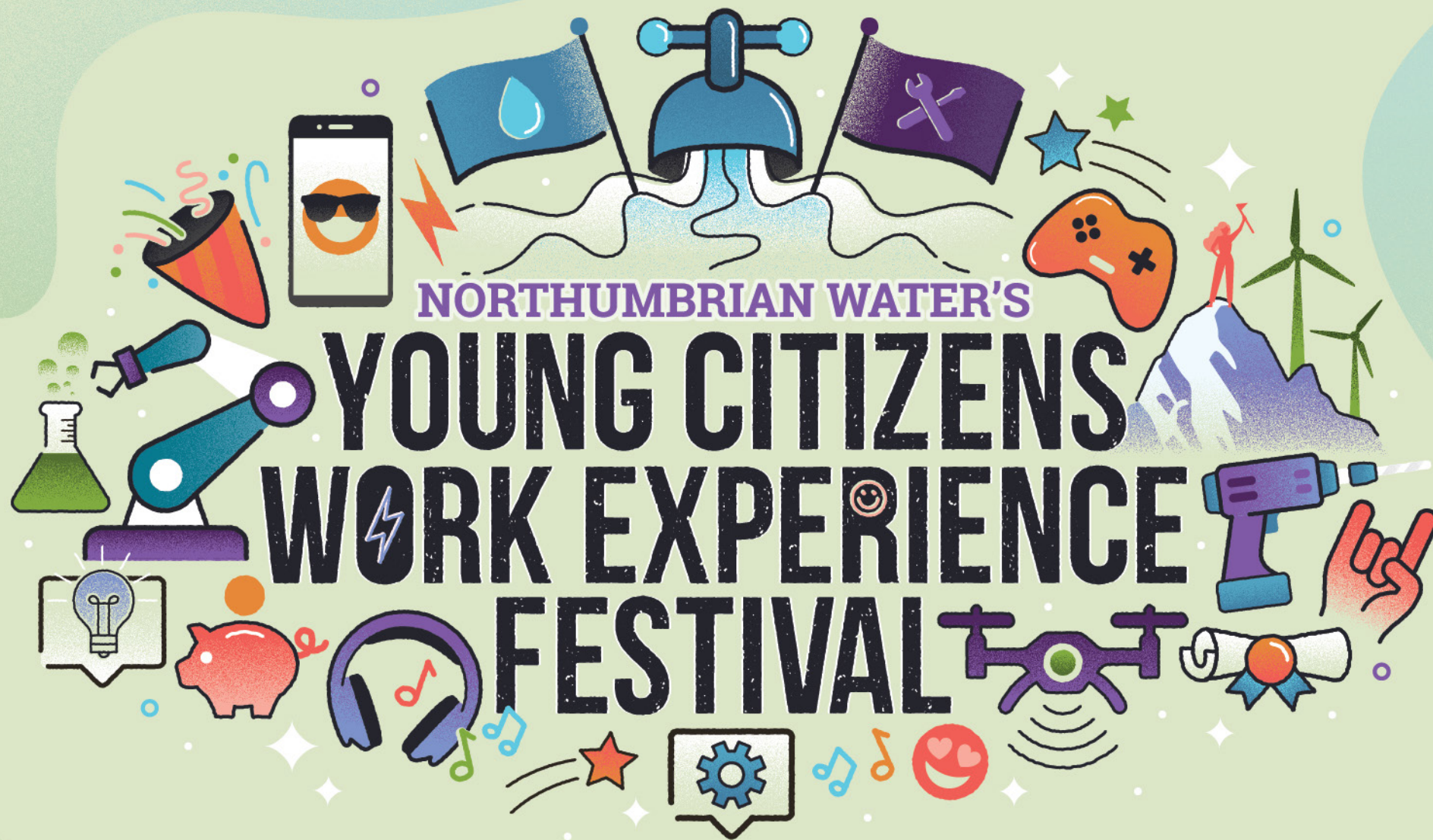
Strong Female Lead Arwa Mahdawi

Will It Make The Boat Go Faster? Ben Hunt & Harriet Beveridge

Good Girl Deprogramming Michelle Minnikin

Lean In Sheryl Sandberg





YOUNG CITIZENS WORK EXPERIENCE FESTIVAL

As our Innovation Festival returned for 2024, we also introduced a new edition...

For the first time ever, we welcomed a new mini-festival-within-a-festival, called the Young Citizens Work Experience Festival.

This was aimed at introducing 14-18 year-olds from local schools into the world of work– giving them precious hands-on experience.

We welcomed 350 students on site, and much more online each day, and they even received their own set of inspirational speaks with Olympic stars Montell Douglas and Harry Aikines-Aryeetey.

They also took part in a number of exciting workshops, with partners such as the Big River Bakery, National Robotarium, Alnwick Gardens, Newcastle United Foundation and the University of Sunderland – where they learned a variety of skills from improve to IT and drone technology.

We were thrilled to see the younger generation really engaging with innovation, and we hope to see the students focus on careers in STEM in the future!



Student
Attendees
860



Schools
12



Students
Onsite
~350



Students
Online
310



External
Events
200



Partners
12



Career
Lightening
Talks
~216



Sponsors
8

AI AT THE INNOVATION FESTIVAL 2024

- ★ 1 AI Squadron Leader - Phil Birchenall, 8 Northumbria University Students and 19 sprint lead AI pilots
- ★ 19 Custom GPTs created to support the sprints.
- ★ 2 playable AI video games created. One REALLY addictive!
- ★ 10 presentations and 4 AI generated songs.
- ★ 1 online module for students on AI and careers, with a prompt offering 'live' interview training based on any job description.
- ★ Tons of insights, images, shortcuts and hacks generated...
- ★ Used in the analysis of the sprint output to find synergies, overlap and additional insights.



THANK YOU

LIVING WELL AT THE INNOVATION FESTIVAL 2024

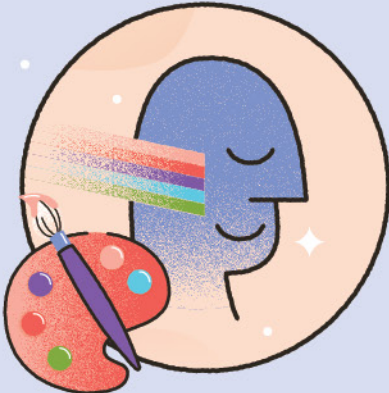
At Northumbrian Water we are passionate about wellbeing and inclusivity. At IF24 we showcased the amazing work of several local charities, collected foodbank donations and held multiple enrichment events that aimed to not only inspire but increase awareness of ourselves and others. We can't wait to do it again at IF25!



>23
families fed
from foodbank
donations



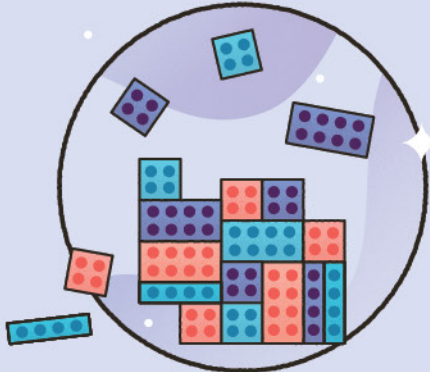
18
seated acupressure
sessions



~216
faces painted



>5280
chest
compressions



3500
pieces of lego



>400
BSL letters
signed

THANK YOU

A BIG THANK YOU

Northumbrian Water's Innovation Festival wouldn't be the event it is without our brilliant sponsors - a huge thank you to all of our sponsors who supported us with our incredible 2024 event.

Scan the QR code to register an interest in sponsoring the Innovation Festival 2025.



THANK YOU FROM GROUP IS DIRECTOR, NIGEL WATSON
AND HEAD OF INNOVATION, ANGELA MACOSCAR

Platinum Racecourse Sprint Sponsors



Gold Racecourse Sprint Sponsors



Racecourse Sprint / Brought to you by Sponsors

KEEP IN TOUCH

KEEP IN TOUCH

Stay up to date with the latest innovation news at innovationfestival.org.

Fancy signing up to our innovation newsletter?

★ SIGN UP HERE

Keep an eye on our innovations and sprint outputs by visiting our social channels:



@NorthumbrianH2O
@ESWH2O



Northumbrian Water
Essex & Suffolk Water



@northumbrianh2o
@eswh2o

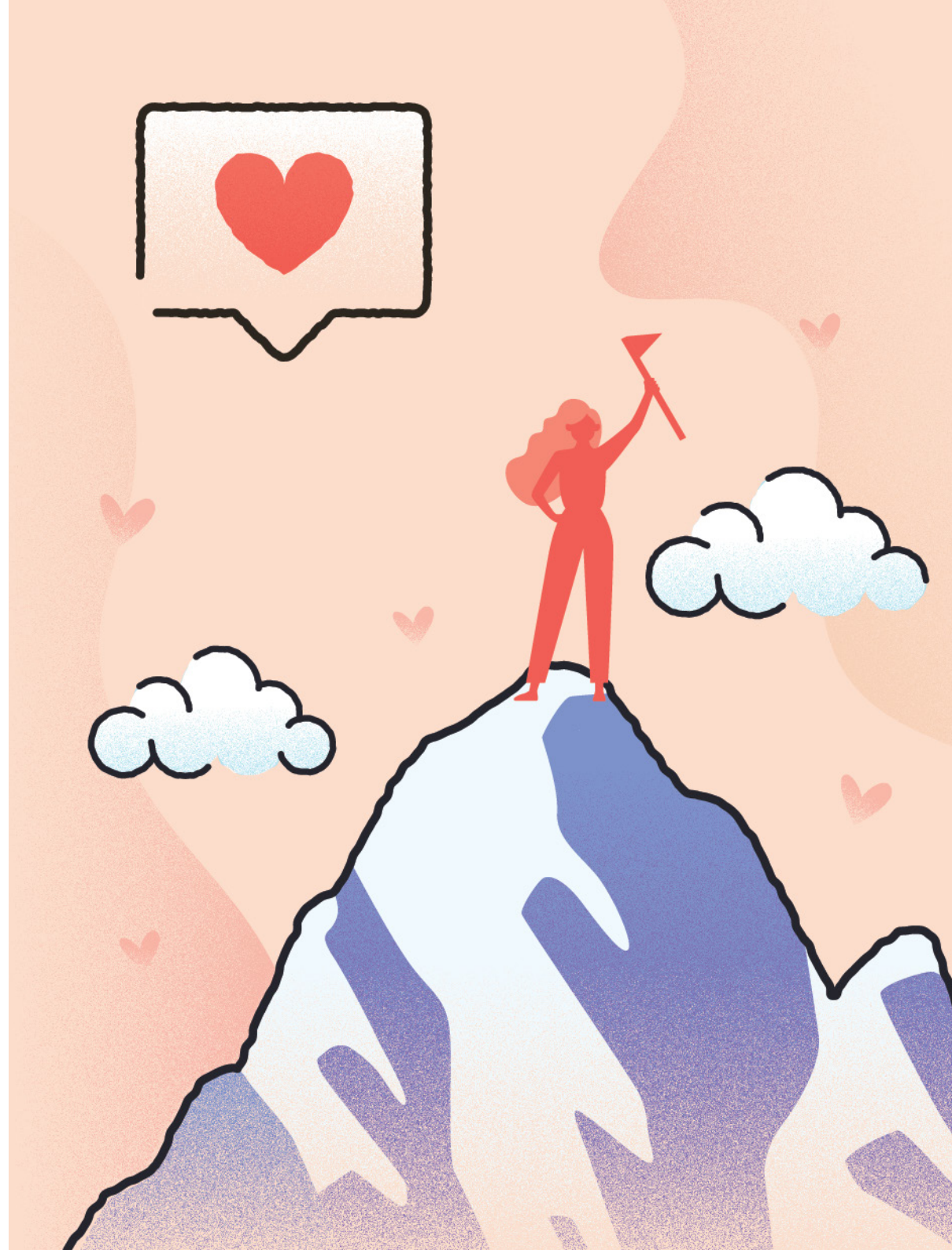


NWG (Northumbrian Water Group)
Essex & Suffolk Water



@northumbrian_water
@essex_suffolk_water

You can also find out more about the ideas and projects which came from **IF24** by joining our **Innovation Encore** sessions in November. Keep an eye out for more information to be shared about these.





SAVE THE DATE

for Northumbrian Water's
Innovation Festival 2025!

7-11 JULY