

London Museum of Water & Steam Kew Jews







Left to right: New volunteer Chris Jones driving the Bull Engine on the last day of our Back in Steam event, the Triple Expansion Engine back in steam for the first time in two years, and the Bull Engine piston mid stroke

Hello

Hannah Harte, Museum Director

Happy New Year 2024 everyone! And what a new year it was. We did it! We made it back into steam for our traditional new years Steam Up. Said like that it may sound like a small thing, but it was anything but. 2023 was an eventful year for the London Museum of Water & Steam, with lots of positive development and change but it was also packed with adversity. The biggest challenges we faced were a broken boiler and serious financial peril.

When I joined the team in June and began to get to grips with the Museum, I innocently said "We'll be back in Steam by Christmas - let's make it happen!" At the time I had no idea how hard, costly and complex it would be to fulfil that promise. We could never have done it (and at times we nearly didn't) without the serious commitment of an amazing team. Richard and our engineering volunteers worked so hard and such long hours, sometimes in the harshest conditions, to get us over the line, and our staff team braved illness and hellish travel debacles to get us the most visibility we've had in a long time. Thank you to all of you.

All in all it was a huge success and we had a phenomenal number of happy visitors, all full of positivity for what we'd achieved. And if we ever needed to be sure that we are on the right track and valued by our communities, and especially our members, we only need look at our Crowdfunder campaign and the donations we've had to help keep us operational. All together you helped us raise a huge £50,000+ (over £30,000 on the Crowdfunder alone) to date. In all my professional life, I have never been prouder to be part of something than I am to be the Director of the London Museum of Water & Steam. I will be working my hardest to take us from strength to strength in 2024.

Richard Albanese, Steaming into Sustainability Project Manager

One and a half years without steam! Three months working towards steam! Three wonderful days back in steam! All GO at LMWS!

Following a busy summer spent as engineer on the wonderful steamboat VIC32 up in Scotland I returned in October to start at LMWS, as manager taking our new 'Steaming Into Sustainability' project forwards. Foolishly I imagined easing into my new role gradually and calmly.....how wrong I was!

Over the last seventeen months we explored the feasibility of repairing our Lancashire boiler which had failed its insurance inspection in June 2022 after a rivet head was found lying loose in the bottom. This had come off the steam take off mounting and tests later showed that all eighteen rivets would require replacement on the fitting. Further insurance requirements meant weeks of gruelling wire brushing and rivet head grinding by our Thursday gang of volunteers, with additional testing revealing 51 suspected failed rivets spread across the shell of the boiler.

This was quite a shock being many more than we expected to replace. Costs and risks associated with repairing a boiler of 97 years of age started to rise significantly, even though two very generous donors had already pledged to help pay for these works.

During 2023 the Museum applied for and was successful in getting a £250,000 National Lottery Heritage Fund 'sustainability' grant to help us take forward plans for becoming carbon neutral, reducing energy consumption, costs and impact on our environment, whilst also exploring how we can better care for our buildings and collections via controlling humidity conditions and improve heating especially in the larger engine houses. Recruiting new volunteers, providing training, additional interpretation, outreach, art and exhibition content related to sustainability and a changing world are also included. Museum finances over the last few years have been stretched to the limit and it was clear by October 2023 that big changes were needed to ensure that the Museum could survive.





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With the need to return to steam quickly so that the visitor offer could be improved and our all-important venue hire restarted (which brings in a third of our annual income), it was obvious that repairing the Lancashire boiler would not allow us to do this or fulfil the wider aspirations described above. It is simply too old, too big and inefficient in design.

Our choices were very limited - a new package boiler plant would cost in the region of 250k and hiring in a boiler would be equally expensive spread across a year. We simply wouldn't be able to raise the funds needed to do this quickly. Longer term, energy supplies and availability in London are likely to change and we need to understand how that would impact on our choice of steam raising plant so that we don't end up wasting money now on obsolete systems which might have a very short working life.

We decided that the best option would be to purchase a second hand steam boiler of modern design which we could install ourselves as far as practicable. This we can use for say a five year period or more until newer energy supplies are adopted and funding becomes available for replacement.

Buying a second-hand boiler was surprisingly difficult as there isn't much of a market for used goods such as these, as they are mostly exported abroad. McNorman Boilers in Shropshire had two in stock at a favourable price. With a charitable discount included we purchased one and arranged for immediate delivery. With our Director Hannah and Trustees' blessing, the question was: 'can we be back in steam for Christmas?!' I said......'mmmm yes I think so?!'

The boiler is of the 'package multitubular' type and is typical of gas or oil fired boilers used in industry today. Made in 1986 it's in good condition, with full insurance survey history having had a leisurely life in a food manufactory in Somerset.







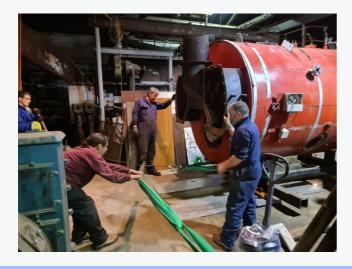
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On arrival the first challenge was to get it from the car park, round the back and into to our boilerhouse. At 8 tons this wasn't going to be easy and contractors' quotes came in at nearly £7,000. Instead we decided to do it ourselves over three days for free, pulling it using wire cable winches with the boiler on industrial roller skates, using heavy objects in store around the yard as anchor points. Our steam locomotive Thomas Wicksteed became a mobile anchor and proved very useful indeed and volunteer muscle did the rest!

Once in position the complexity of plumbing water and steam pipes in, fitting of flue systems, installing electric and gas supplies, feed water tanks, chemical dosing plant and other ancillaries became apparent. All of these needed to be carefully surveyed, researched, designed, quantified and ordered so that they could join to existing Museum systems in a very tight timeframe.

Many suppliers up and down the UK gave us substantial charitable discounts and friendly advice and we are particularly indebted to: Cochran Boilers, Fulton Boilers, TLV Steam Specialists, A1 Flue Systems, Combustion Engineering Association, Besseges Valves Tubes and Fittings, McNorman Boilers, Ogley Brothers, Atlas Boiler Company, DONAU Express Dry Cleaning, Internal Fire Museum of Power, Spirax Sarco, Feedwater Treatment Specialists, Abbott & Co, Byworth Boilers, Kings Boiler Hire, Deepwater Blue, HSS Hammersmith, Varley Boiler Services, H.A.Mcewen, Israel Newton and others.

Our fabulous volunteers stepped up to the challenge, in particular the Thursday evening gang who effectively became a seven day a week gang in the crucial last few weeks before Christmas. All boiler fittings had to be stripped down, cleaned, serviced and surveyed before being refitted. Blowdown, steam, water, drain and vent pipes had to be cut, threaded, screwed together and installed. Boiler and water tanks had to be thoroughly cleaned out and old flue systems removed. New pressure reducing systems had to be installed. Endless runs of electric wiring, controls and relays had to be checked and tested and our talented electrical engineer Ben even fitted sensors so that we can view boiler performance data in real time on our phones. Endless battles were had in trying to loosen or tighten nuts and bolts, as we simply do not do metric here at LMWS!





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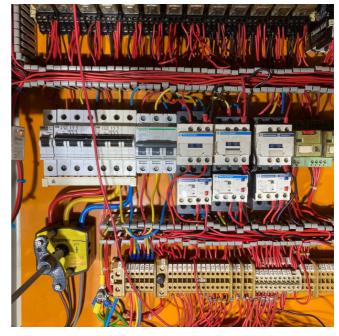












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Many volunteers made purchases out of their own pockets to help, buying everything from pipe clips and electric cables to threading machines and lifting gear. Numerous anonymous and private donations came in, supporting the works further. Our boiler inspector Simon, showed the patience of a saint, visiting us out of hours and even during his holiday to help ensure we were compliant and ready for the big steam testing day. He brought a gaggle of fellow inspectors who did wonders on a corporate volunteering day, cleaning and polishing our engines and helping with last minute boiler works.

All through this, our Director Hannah and dedicated staff team spread the word and pushed our return to steam, bombarding social media, radio and other outlets with promotional material. They gave up or avoided asking me if we would make it in time, I couldn't answer, I simply didn't know! Oh how many sleepless nights we had worrying about hordes of visitors queuing to get in only to find our boiler wasn't working on the day!

After several trial steam ups on the boiler running late into the night, we finally tested the Steam Hall engines on the Thursday, and tested the Bull and Boulton & Watt engines on Friday. Apart from problems with the Boulton & Watt caused by need for new wooden piston rings to the air pump, all the engines worked satisfactorily and were passed for service.

Saturday, Sunday 30th and 31st December and New Years Day saw our engines working merrily away to large numbers of very appreciative visitors, friends, members and supporters from all over the country. The boiler behaved itself beautifully and was on show to anyone who asked, volunteers and myself being very happy to give guided tours.





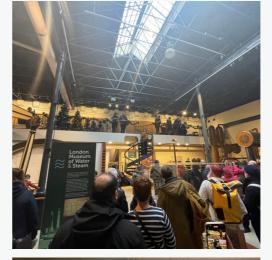
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It's early days yet, but it looks as though we should make substantial fuel savings in using our new boiler against our Lancashire one of old. It's two thirds smaller in size and stored water volume and can raise steam from cold in a few hours as opposed to a day or two, providing roughly the same amount of steam but at a much higher pressure which is then reduced down to suit the engines. It should even manage the 90 inch engine which we hope to reawaken for testing over the next few months! Fingers crossed!

The total project cost to date is £40,443. This may rise to a projected £56,900 if we have to purchase new water dosing, softening and treatment equipment, but we are looking to obtain these as a donation from a hospital boiler house which is due to close in the next month or so.

Thank you everyone who has helped make this happen in record time and very difficult circumstances, as always another LMWS first and a first class achievement!









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We asked some of our Volunteer Engineers – Clive, John, Ian, Ben, Martin, Chris, Glen – to talk about the highlights and challenges that they faced in getting the London Museum of Water & Steam 'Back in Steam'...

Crazy Xmas boiler gang! Twelve hour days, not much sleep, but so worth the effort! The icing on the cake, loads of really great visitors. Onwards and upwards!

Seeing things come to life again; the Museum, the engines, the Beel Boiler and actually having a warm Steam Hall!

After 2 months hard work, it was touch and go as to whether we would make it due to various set backs along the way. In the end, we made it, and it was great to see the museum alive again after nearly 3 years.

Challenges: scraping buckets of s***e out of the feed tank and being Richard's personal BSS [British Steel Supplier] chauffeur.

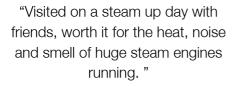
Challenges: having only one 24mm spanner between several of us , and that was only after Richard C gave us one in the pub

Down to the wire commissioning and boiler inspections, last minute flange tightening and the relief when the big green light came on

When we finished moving the 8 ton boiler from the car park to the boiler house was a high point!

Sore knees, back and feet.

Visitor Feedback ***



"I highlight the Passion of the museum's Volunteers!!! Congratulations on ALL your Huge Work!!!" The New Year Steam Up (2024) was the first time the engines had been operational for a couple of years so definitely an event. The pride and enthusiasm of the volunteers were tangible and well deserved."

<u>Poetry in Motion</u>

The Lancashire boiler at Kew, Had rivets cracked in two. Volunteers & staff, unfazed, Installed the Beal, just days, Before steam-up visitors marvelled at the view!



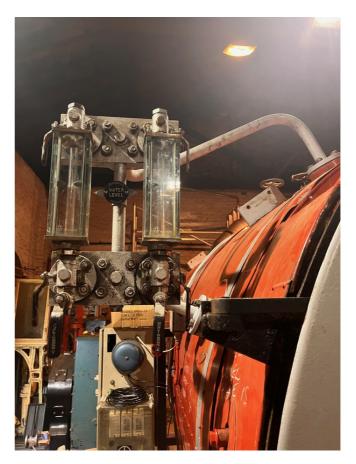
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Water we doing about water?

Ben Hussey Volunteer & Electrical Engineer

Each day of the steam-up our new boiler turned about 8,000 litres of water into steam! However nearly half of this (3,000 litres) was recycled from condensate recovered from the pipework and steam engines.

We are hoping to improve our heat and condensate recovery further over the next year with the installation of a better blowdown vessel (recent donation) and new feed tank (not yet funded).



Equivalent water consumption

FOODSTUFF

Chocolate (around 5 bars)
Beef (1kg)
Apples (1kg)
Potatoes (1kg)
Beer (Pint)



AVERAGE WATER CONSUMPTION

17,196 litres 15,415 litres 822 litres 287 litres 168 litres



"Little and Large"

Andrew Barnard Association of 16mm Narrow Gauge Modellers

The London group of the Association of 16mm Narrow Gauge Modellers was delighted to be part of the LMWS 'Back in Steam' weekend over New Year. Continuing our long association with the museum, this time we adjourned from our usual 'pitch' in the Steam Hall to run trains in the Babcock Room all the while enjoying the scene of 4 'big' engines in steam accompanied by an impressively large throng of visitors so obviously thrilled to see the heavy metal moving once again.

Our more modest little steamers chuffed around the group's track on all three days of the weekend

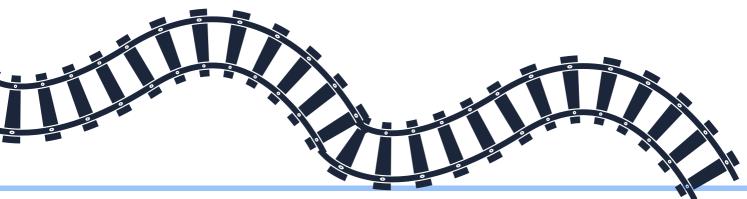


A close up of one of the model steam trains being demonstrated during the Steam Up weekend

with the most common question being, as ever, 'But they're not real steam engines are they?' – to which of course we reply 'Oh yes they are!' (in best seasonal tradition). Which in turn provides an ideal opportunity to talk visitors through the way the engines work and how, in essence, they're the same as the museum's somewhat larger stationary machines.

A bonus was to have Thomas Wicksteed passing the windows at regular intervals, echoing our enthusiasm for narrow gauge railways. We even shared drivers!

We look forward to meeting you and chatting again soon, the next opportunity being 10–11 February, the beginning of Spring half term. It's such a pleasure to lend support to the museum's endeavours while having the opportunity to run our trains in such a fantastic location.



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Crowdfunder update

Amy Dobson & Danielle Holmes Engagement Coordinators

In September we embarked on our first ever Crowdfunder and launched an urgent appeal to keep the museum open after a difficult few years that saw finances stretched almost to breaking point.

We are so pleased to announce that we raised over £50,000 in total, with £30,305 coming from the Crowdfunder alone.

We couldn't have managed this without the support and donations from our communities, and especially our members. We would like to extend our thanks to everyone who donated and shared our appeal with friends and family.

We will need to continue to fundraise to safeguard our museum, the collection and our steam heritage for generations to come, but for now these funds will help us to bridge the gap in our finances, and begin making positive changes. Please continue to support the museum in all of the ways that you can and do.



A very special thank you...

Scott & Hilary £2,000 Bill Tandler \$10,000



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Crowdfunder - a special thank you:

£40-£100

Glen Williams **Awjasper** Stephen Devlins Cherry Baker Mary Ronan John Hughes Dr Robert Smith William Barry Jacques Adrian Bray

Jim Sands

Alexis Zander

Sarah VanSnick

Jessica Gannon

Irina Fuggles

Alan Clarke

Peter Nicol

Jason Clifton

Nick Sutcliffe

Amanda Roy

Nicole Levesque

Bianca loannides

Gordon Cochrane

Claire Horlock

Nami Kusumoto

John Holden

Alun Adler

Chistinem_j23 Peter Mullen

Nick Bourne

Simon Cable

Lan-Lan Smith

Piers Calver

James Close

Marianne Kassapian

Sally Malit

David

Ptrbloxin

Adam Price

Rosemary J Stone

Beatrice Panariello

Steve Wilson Elizabeth Covington

Seb Lees

Felicity Daniel

Gordon Emil Manning

Rebecca Lea Emma Renton Agata henderson Kathy Dent Louise Fletcher Alison Apleby Julie Stefanut

Simon Fitzpatrick Ben Russell

Blanca Mercade Oleksandr Mykhailenko

Henry Cleary Michael Moate

Helen Edwards Stewart Mcalpine Sophie Bradford

H Shrewsbury-Aldridge N Sully

Franklin B Tucket Simon Fitzpatrick

Christian Wagner

David Perry Nicole Levesque

Julian Glover

£100-£200

Brentford Voice

Val Bott **Guy Lambert**

Eva Harte

Gemma Morgan

Braman Wing Sue Tumath

Jessica Stitt

Cara

Phil Evans

Richard Damian Nance

Negley Harte

lwan

Thomas O'Leary

John Stroughair

Robin May

Faye Hamilton

Keith Reed O H J Pearcey

Rosmarie Matter

Christopher John Great

Bessie White Peter Hall

George Houstoun

Matthew William Barnes

Nick Higham

Chris Greenwood

Kevin Bilke David Bishop Alan Clarke David Welch

Michael Harry Smith

John Stone

Jeremy Scholefield Sally Stephens

Christian Rady

Hisae Summerhayes Twins Club

F Hollom

Dietmar Voelk

£200-£400

Vanguard Self Storage

Stephen Skinner

James Nye

Shirley Worth for Ron Howes

Rob Casey

Noel Christopher Simmons

Nigel Barnes David Jacobs

Carl Brooks

John Fevyer

Andy Pirson

Mike Munrow

Madeleine Walsh

Royal College of Science Motor Club Mrs D. E. Matthews



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A very warm welcome

A very warm welcome to our new volunteers.

- Chris Jones, working collections
- Neo Aldridge, train team
- John Henry Cleary, working collections
- Ciaran Burns, working collections
- James Roe, Archives
- Piran Harte, woodwork

- Justin Treadwell, cleaning collections
- Isabella Chan, cleaning collections
- Rachel Passmore, cleaning collections
- Uchenna Odukwe, FoH
- Caris Jaffe, gardens and site
- Richard Smith, maintenance

Volunteering Update

Jade Husseyin, Volunteer Coordinator

Volunteers are always key to our work here at the museum, but over the past few months they have outdone themselves. The Thursday evening team worked into the night and through storms to get everything working for steam up. A gargantuan effort made by all and we are all grateful to Richard and the engineering volunteers for making this happen. The visitor welcome team were amazing over steam up, dealing with over a thousand visitors with outstanding customer service. Steam up was a success due to all of our volunteers, and as always, we could not do what we do without you.

We had the first volunteer thank you party since COVID, it was wonderful to see volunteers come together, especially those who don't normally work together.



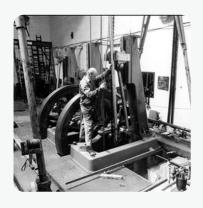
The volunteers and staff celebrated at the Christmas party with a tricky quiz and mulled wine.

There will be more volunteer events in the future, and we are looking forward to it.

I went to the EHCVS volunteer fair just before Christmas which resulted in interviews over January. Amy and I will be at the University of West London volunteer fair, hopefully we can capture some young ones for the museum!

Lastly, work experience has already started for 2024 and we have ten spaces filled! One is from the younger sibling of a work experience from last year. We look forward to welcoming them all to the team!

Interested in volunteering?



We are hoping to extend our train team, are you interested or know someone who is? Please email us as we hope to start training very soon! We also need lots of bodies for the garden, especially as we move towards spring.

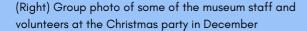
Interested in Engineering? Know someone who is? We are always looking for volunteers! Send over an email to **museum@waterandsteam.org.uk** with interest and any question.

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LMWS Staff and Volunteer Party

Amy Dobson, Engagement Co-Ordinator (Communities & Families)

On Friday 15th December we had our staff and volunteer Christmas party. It was great to show appreciation and thanks to the team for all of their hard work over the past year. There was the usual of mince pies, mulled wine and biscuits, as well as a festive quiz that got everyone puzzling together and having fun!





Update from our communities



The Arts & Crafts group outside of the museum with a big 'thank you'!

We're delighted to share news from one of our community partners, Speak Out in Hounslow, that they have been successfully awarded £499,913 from the National Lottery Community Fund allowing them to continue their fantastic work for another 4 years. We love welcoming Speak Out to the museum on Tuesdays and Wednesdays and are really pleased that they will be able to continue all of their exciting activities and events here.

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An update from our Site Co-Ordinator

Peter Oliver

I want to start this one with a personal thanks to Richard and the volunteers who worked tirelessly to get the new boiler installed and the museum back into steam. New Years' Steam up was fabulous fun and a really great achievement.

We have installed a new fire alarms system for the museum building and this was tested daily during steam up and has gone back to its weekly testing schedule.

Allianz who inspect our steam plant/pressure vessels and lifting gear had a corporate day volunteering here before Christmas. They helped set the Babcock room up for our Santa event, they wrapped all of Santa's Christmas presents and their team also cleaned & helped get us ready for Steam Up. My thanks go to Simon Kearsley for suggesting and helping organise the event. He certainly cooked a decent bacon roll! Feedback from Allianz management was positive and they're considering doing another one later in 2024.

Tenants wise: (1) I have helped Vikki & Rolf move from being casual users of Derek's Carpentary workshop to full time tenants of unit 1. Noel spent a considerable amount of time working on the electricity supply – Thanks Noel! (2) After 35+ years we finally said "Goodbye" to Shelley & also to John who shared a unit. Both have said they'd pop back in and keep in touch (3) We welcome Piran Harte into that unit and into the heritage craft community onsite. (4) Our volunteers, Dave & Tom, have worked incredible hard maintaining all of our tenanted properties. (5) We have seen works to the Diesel House, the tenants have moved around and on a positive note – we have two vacant studios in there. A decent well lit space on the upper mezzanine and a larger self-contained unit under the mezzanine. If you know of anyone looking for space – do please put them in touch with myself or Hannah.

I'd also like to thank Margaret and volunteers who have kept the gardens & site looking good.

Acquisition of Ron Howes' archives



The museum has recently accepted a donation of the personal archive of Ron Howes. Many of you will know, or know of, Ron who was instrumental in the establishment of the London Museum of Water & Steam back in the 1970s. He was one of our longest standing volunteers and did a variety of roles around the Museum over the years from education sessions to polishing and maintaining the engines.

The next steps will be to inventory the items and then formally accession anything that can further our understanding of the story of London's water supply, the history of our site and the people who helped make us the Museum we are today. Thank you to Ron's daughter for approaching the museum with this offer.

(Left) An advertisement to support the development of the museum, c1970s

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Upcoming Events



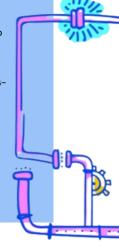
WATER WARRIORS

Saturday 10- Sunday 18 February

Dive into this February half term at the London Museum of Water & Steam! Join us for a week of family-friendly fun and learning, and join our quest to become "Water Warriors". February 10–18!

We've got interactive storytelling sessions, and handson arts and crafts where we'll use recyclables to create environmentally conscious masterpieces!

Plus, families can work together to create a 'climate change pledge'. Each pledge will become a vital piece of amazing collective artwork, just in time for World Water Day!



The London Museum of Women in STEaM

Saturday 10 March

Celebrating and promoting the achievements of women and girls in science, technology, engingeering, arts and mathematics. There will be workshops, talks, discussion panels and activities for all the family.

Full schedule coming soon!



For a full list of upcoming events, please visit:

https://waterandsteam.org.uk/events





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Upcoming Events













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