



We're on our Wey!

Water monitoring in the River Wey Catchment in 2023

Made possible thanks to the generosity of...



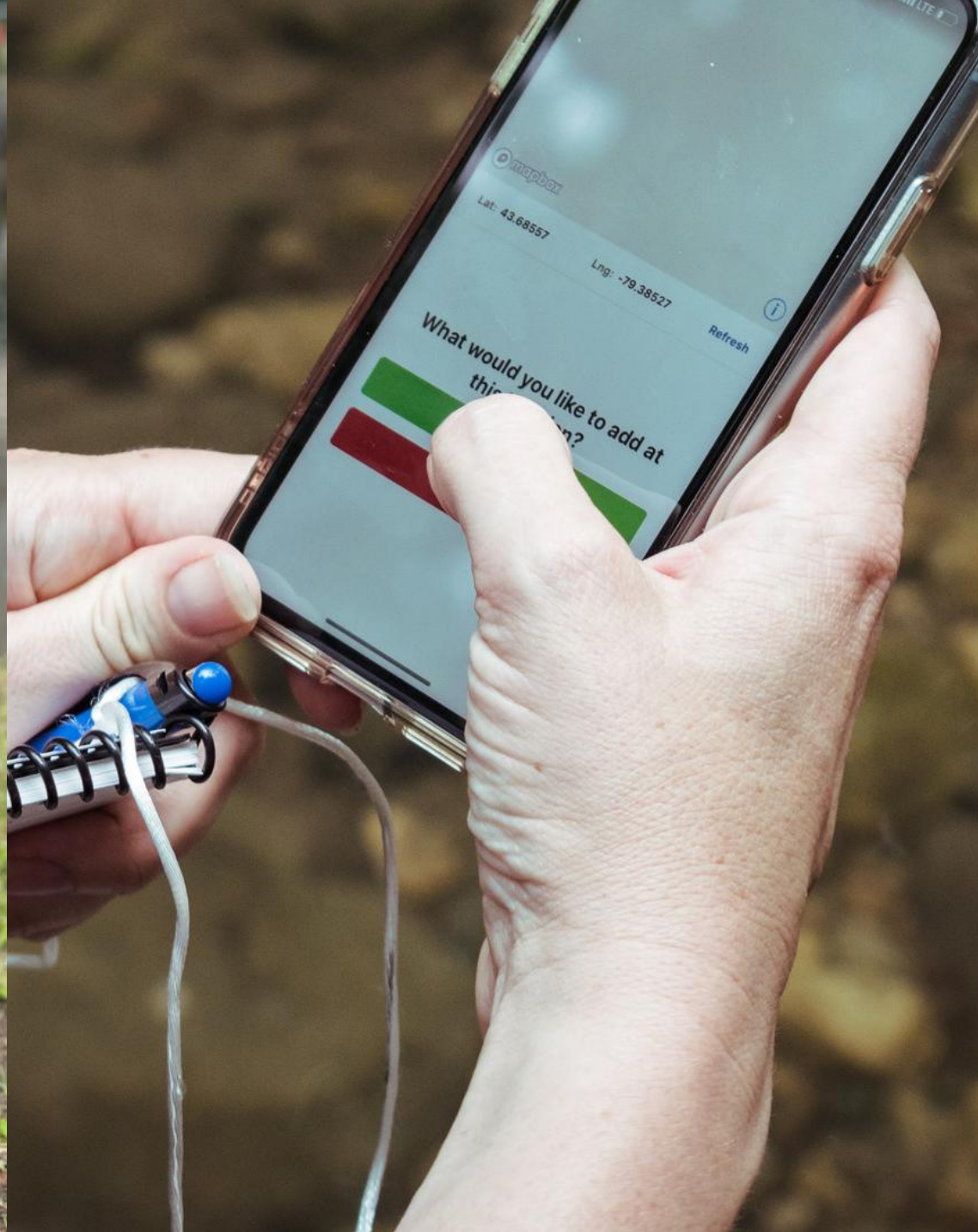


Water Rangers builds easy-to-use, affordable tools to crowd-source water quality data.

With climate change intensely impacting our rivers, lakes, and ocean, we need people on the ground looking out for the health of our water systems for them to be resilient. At Water Rangers, we connect people to science so they can help take care of our most precious resource: **water**. Learn more: waterrangers.com/uk

This impact report outlines the activities in the Wey Catchment in 2023!

Bo has been testing the River Wey with his father at Radford Park for the past year and recently taught his classmates!



Collect

Testkits are easy-to-use, accurate and affordable. Plus we're always improving!

waterrangers.com/uk/shop



Input

Data platform is curated for the public and allows volunteers to enter data

app.waterrangers.ca



Share

Data is "open" and can be shared easily so it can be used by decision makers.

waterrangers.com/uk/data-platform/sharing-data/



Water Rangers mission

LEARN

Create space for just about anyone to understand water's complexity and importance with the training resources they need to teach others.

Youth education

Community-based monitoring

TEST

Provide tools that allow anyone to have a hands-on and joyful water testing experience, emphasizing the importance of following data standards.

Water quality testkits

Data collection platforms

ACT

Transform humanity's relationship with water and inspire people to take further steps in protecting local waterways through the power of collective action.

Water stewardship

Leadership



Code

Our approach includes three core principles. They're the foundation for applying our mission in communities.

1. For communities
2. Wide-eyed optimism
3. Politically neutral

waterrangers.ca/code



Hubs & monthly monitoring

The core of our innovation this year has been working at the grass-roots to establish local capacity to monitor regularly. And, thanks to many local councillors, we've been able to equip them!

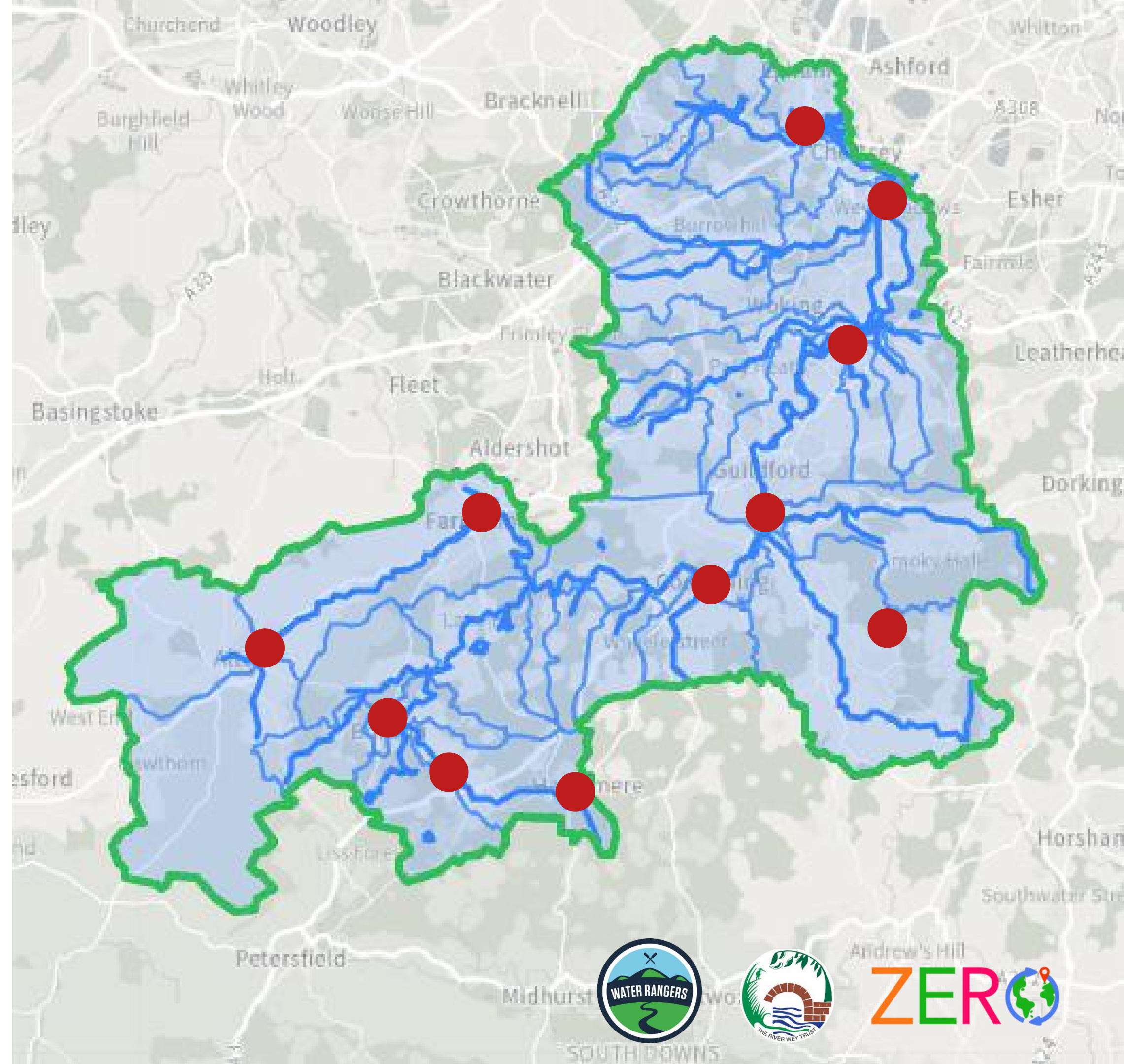


Testing Hubs

Groups of people who care about their part of the water body - their river, stream or pond. In the Wey Catchment, we now have 9 hubs (plus three more in the works) - some running for over two years. It's giving us a good spread of information. We've made good progress, but there is still a lot more water to cover!

The hubs share resources and organise testing days, often with a get-together in a pub or café afterwards to update the numbers and compare notes - sharing experience and experiences.

[Learn more about the Hubs](#)



Monthly water testing

Testers are monitoring locations every month to get us trends across the entire catchment. Because seasons affect water quality, long-term monitoring helps paint a picture of what is normal. The longer term, the better!



Left: Anna welcomes new volunteers on the Tillingbourne.
Above: Bex, Duke of Edinburgh volunteer, recording results.

River Fly!

We helped expand invertebrate testing in our catchment with monthly sampling in Liphook and Godalming, and demonstration events in Haslemere, Farnham, and Guildford. Combined with water chemistry data, these water creatures help us assess water health. We share these results with Surrey Wildlife Trust and others.



Volunteers across the catchment!

Behind the data is community members coming together to test waterways. We're testing for both chemistry and invertebrates.



Above: In Farnham! Start testing, and you soon have a crowd of interested helpers - and future volunteers. Right: In Liphook and Haslemere, welcoming testers of all ages.

Events

Beyond monthly water testing gatherings, it's been an incredible team effort to publicize the water quality movement. Here are a few highlights.



Out and about

From village fairs, school events, radio and newspapers, our water monitoring program is making waves in our community.





100
People trained by
12 volunteers

122
Locations sampled

1,830
Datapoints

World Water Day

'Catchment Snapshot'

Over one weekend, thanks to Godalming Town Council, we tested at 122 locations in order to learn a little bit more about our catchment.

Special thanks to all the volunteers who helped pack kits and train our new volunteers. Shout out to our Duke of Edinburgh'er Bex, who not only helped with the training video, but also trained new volunteers in Haslemere!

Also huge gratitude to Alistair Young (River Wey Trust), Emma Pelham (Surrey Wildlife Trust), Simon Browning (Rivers Trust) and Alex Adam (Rivers Trust) for helping us figure out sample locations and a system to get our volunteers signed up.

[Read the full story.](#)



Summer party on the river!

Did you know that drinking water in our area comes from the Tillingbourne? Dedicated tester Anna hosted us at the Shalford Mill (on the Tillingbourne) for a summer party. It was a great reminder to enjoy our beautiful waterways and how important community is! After swimming and so much delicious potluck food, we enjoyed great conversations and cups of tea by the river.



It's a River Run!

For World Rivers Day, we raised funds to establish a community-led e.Coli lab at the new ZERO building. Everyone dressed up as their favourite watery creature. Plus, we publicized our positive movement and were featured on BBC Surrey.

[Watch the video and read the story.](#)



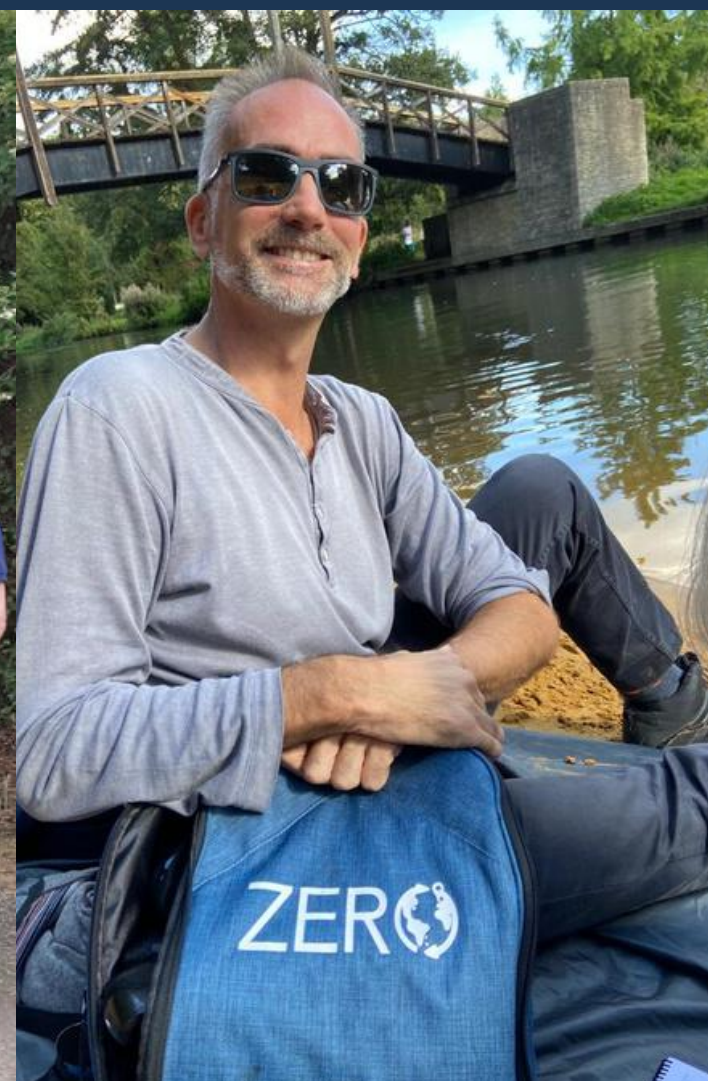
A team effort

Events wouldn't be possible without the dedication of our volunteers! They work together to plan/run events, train new volunteers, and assemble equipment!



Water testers leading!

Our amazing volunteers worked hard to grow their knowledge, from taking new volunteers out and organizing excursions to Slyfield Water Treatment, Unstead Nature Reserve and so many more events. **A special shout out to Fiona for taking out new Guildford folks, and Sarah for organizing so many events for rivers!**



Innovative collaborations

What a great year for learning and sharing! Beyond our innovative approach to creating hubs and running a “blitz” event, we also developed new tools and collaborated locally and nationally. Here are a few highlights!

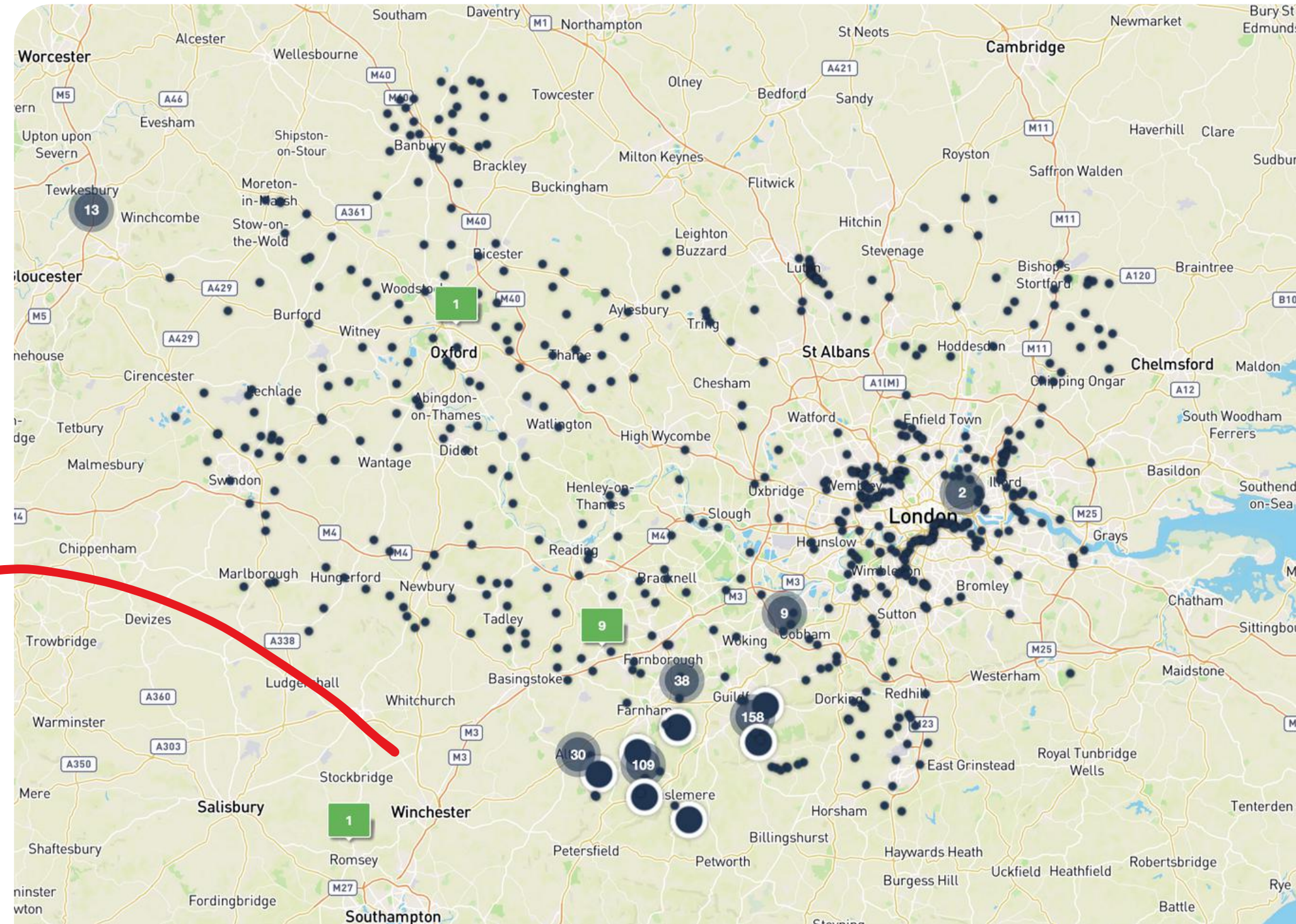
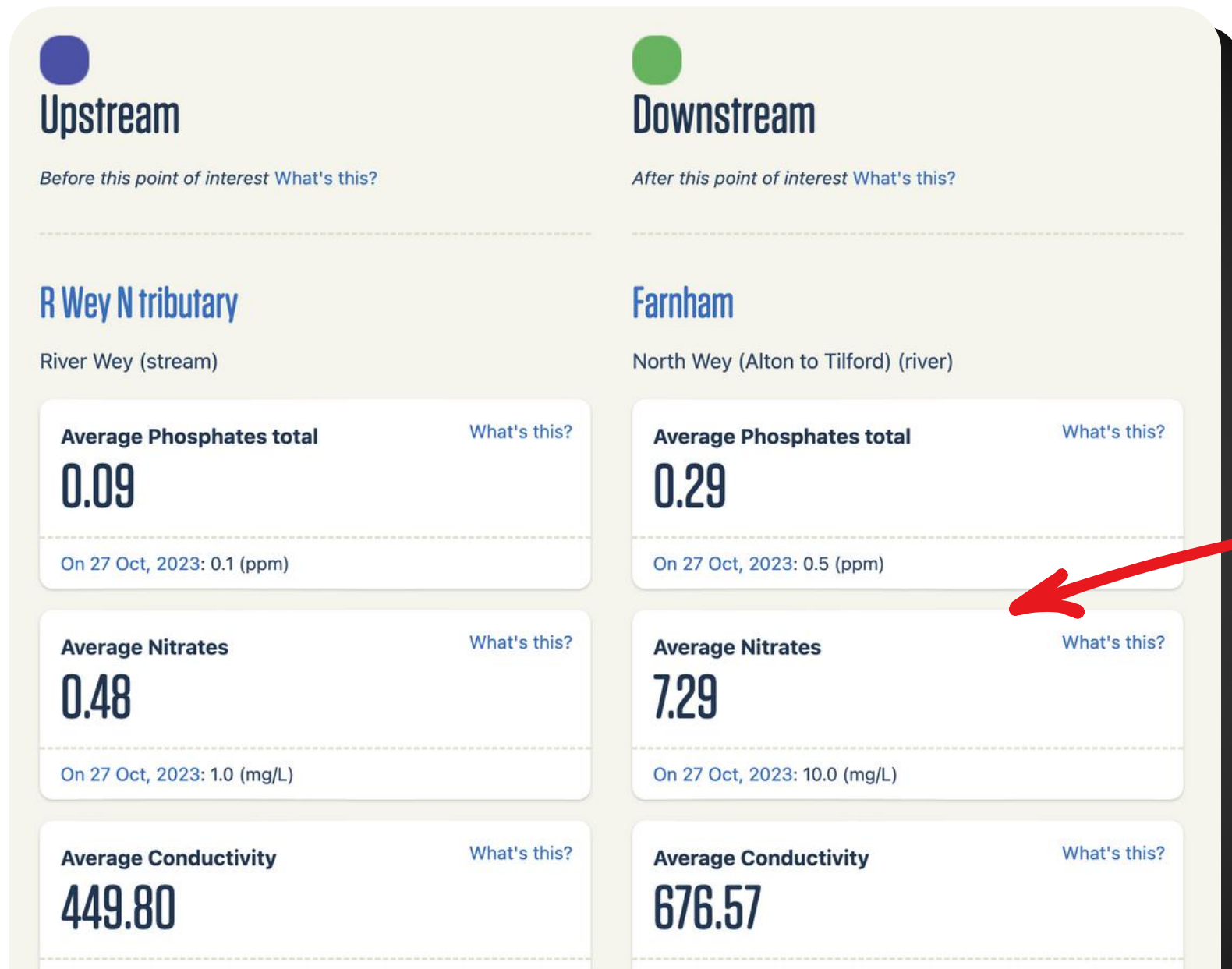


Points of interest

A grant from Godalming TC funds this development prototype. We can link to the water companies and other databases and relate our testing to their activities.

We're giving visibility to places on the river which need attention.

In this case, the POI report shows step increases in test values around a wastewater treatment plant - but POI can also show positive improvements where, for example, a reed bed is doing its work in reducing nutrient overload.



I saw the sign!

Our goal in Godalming is to provide more ways for local people to learn about and get involved in monitoring. At the same time, we're prototyping mechanisms to have sustainable funding and reduce burnout in volunteers. Our sign at the "Duck Viewing Platform" serves as an educational resource and a low barrier to entry for the public to join us!

We've brought signs to other areas of the catchment too.

Thanks to all the Godalming Town Council support in setting up our hub. Thanks, too, to The Star Pub for supporting our resupply costs. We've loved hosting monthly water testing sessions, and we've been sharing our successes with the national CaSTCo project.

Organised by the River Wey Trust
riverweytrust.org.uk
@riverweytrust

Co-created with tools from WATER RANGERS

How's the water quality?

Dedicated volunteers are setting up regular water testing in this area. It's in coordination with groups throughout the River Wey Catchment! By monitoring the river regularly, we can better understand what's normal and when water needs help.

Every month, we use citizen science tools at many locations to test for temperature, pH, conductivity, nitrates and phosphates. We also do 'kick testing' for invertebrates at one location.

Want to help?
Water testing training for new volunteers takes place here once a month (usually on either Saturday or Sunday of the last weekend of every month at 10am).
For exact dates go to riverweytrust.org.uk/godalming

This program's launch was generously funded by:

Godalming Town Council
Supporting Our Community

THE STAR
Pub



Collaboration highlight:

Unstead Nature Reserve

Thanks to volunteer Sarah who organized a tour of this admirable reserve. It takes its source water from Godalming Water Treatment plant and filters through beautiful wetlands. With the help of Warden Keith, Trevor, an Unstead and Water Rangers volunteer has begun testing monthly at various locations. Initial results are showing the benefit of this nature-based filtration!

[Read the story.](#)





Fun times in Coventry testing and learning from other experts from across the country.

Part of the citizen science revolution in the catchment... and the country

What we've been doing from the grassroots up, with the support of our community's councillors, has been noticed by the catchment partnership and the national CaSTCo (Catchment Systems Thinking Cooperative) project.

We're sharing what we've learned (and, in turn, learning from) catchments across the UK. For example, we've supported groups in the Ribble, Severn, Leeds, and more, to set up their community-led monitoring programs.

[Learn more about the Wey Landscape Partnership](#)
[Learn more about CaSTCo](#)



Impact

There's nothing like some stats to really show you what all this great work looks like at a high level. It's not just about number of samples, though. It's about the people!



Results!

9

Local hubs established or being established

9,000

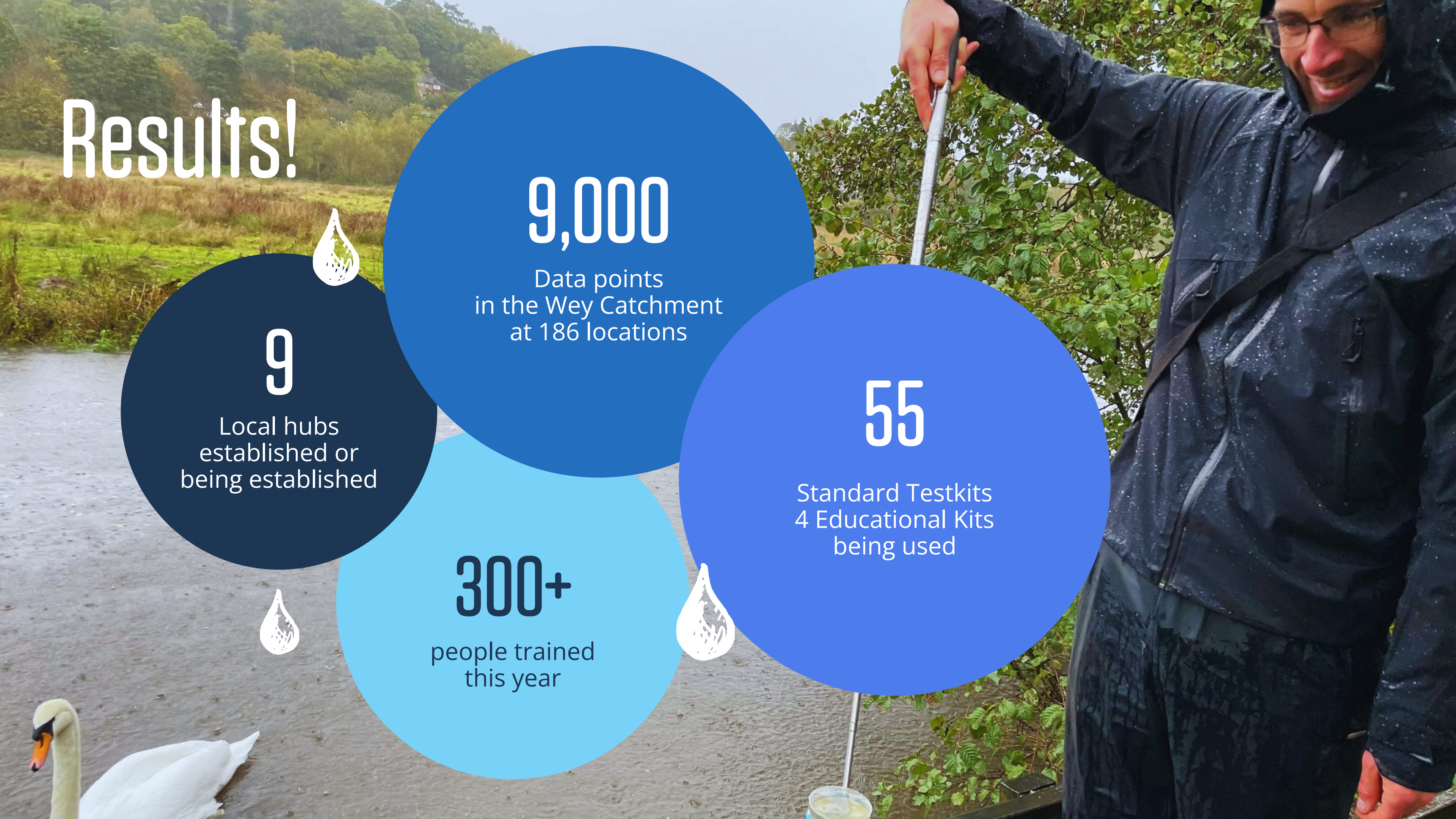
Data points in the Wey Catchment at 186 locations

55

Standard Testkits
4 Educational Kits being used

300+

people trained this year



Building skills and confidence!

88%

Participated in other stewardship activities, with 47% attending public meetings

92%

Got involved so they can collect important water quality data for their local waterway

76%

Taught others how to test, teaching on average 36 others

Results from 2023 survey of volunteers

Volunteers say...

I have volunteered/campaigned with Surfers against Sewage for about 15 years, regularly taking part in beach cleans and organising river cleans. I was thrilled to find Water Rangers are testing water quality of the river in my home town and very glad I joined.

-Daniela Paull

"Water Rangers has been such an inspirational organisation to be involved with. So much enthusiasm to make a difference to improving water quality; so many knowledgeable people and so much to learn. It's been great to feel that there is something practical a citizen volunteer can do that could change things for the better."

- Kate Riley

I've learnt so much about the Wey and its water quality, inspired by Kat's amazing enthusiasm and Zero Carbon Guildford. I'm part of a regular testing group by Slyfield sewerage treatment works - the results of which (high nitrates downstream of the works) prompted a visit to meet Thames water, a tour of the sight, and becoming a stakeholder in the redevelopment of the site. I love the community which has built up around Water Rangers and love chatting to passers by about what we are doing in terms of testing to monitor water quality, it's a topic many people are interested in - and there's a sense of achievement in trying to work towards a goal of improved river water quality.

-Alan Thorogood



I love being part of Water Rangers because it has brought together a dispersed group of locals who are practical, informed, care about the natural world who have a 'can do' attitude. We are a tiny but important part of a bigger movement working towards healthy rivers.

-Alyson Canton

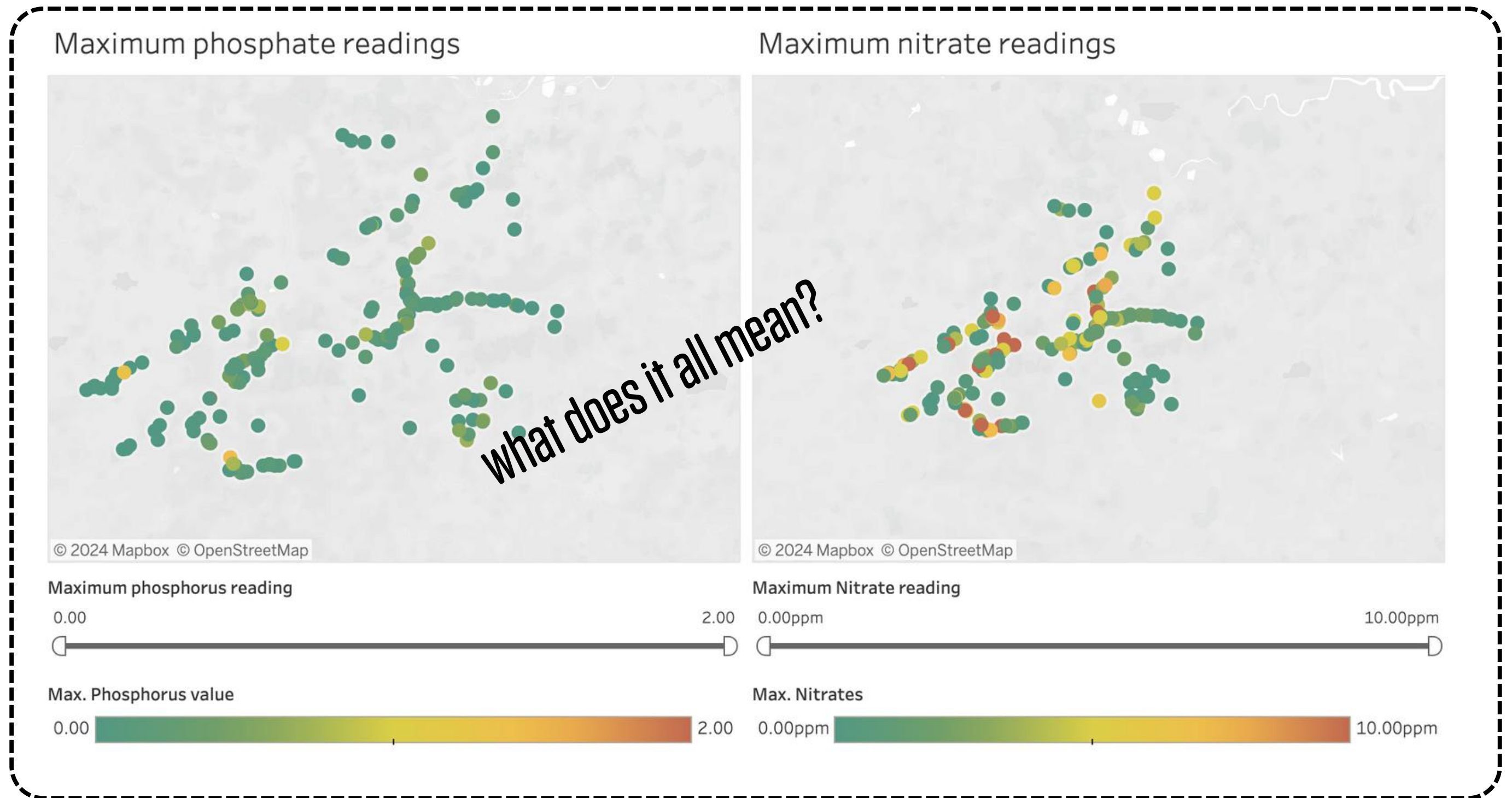
What's next?

Maintaining our water monitoring program will require sustainable funding for our resupplies. But we're not stopping there! Here are a few of the many "irons in the fire" for 2024 and beyond.



Using those results!

We share all results with a number of groups who can use the information as part of an overall view of water quality, but for local information we need to be able to share and interpret the results. Locally useful, interesting, and making the difference. We'll be hosting PhD student Stella Christou at our event to go over results.



Our community lab is coming soon!

Last year, University of Surrey helped us test one method, but we weren't happy with the results. Last Fall, Lewis, a microbiologist from South East Rivers Trust, travelled with us to visit IDEXX. We loved their ISO-certified method!

A community lab is in the process of being set up at ZERO Guildford. It's thanks to University of Surrey, who is lending us the equipment. Special thanks to Dr. Bing Guo there who, along with her PhD students, that we're able to do this.

We're looking for funders for the 'consumables', but when we're done, we'll be able to get accurate results at a fraction of the cost of professional lab services!

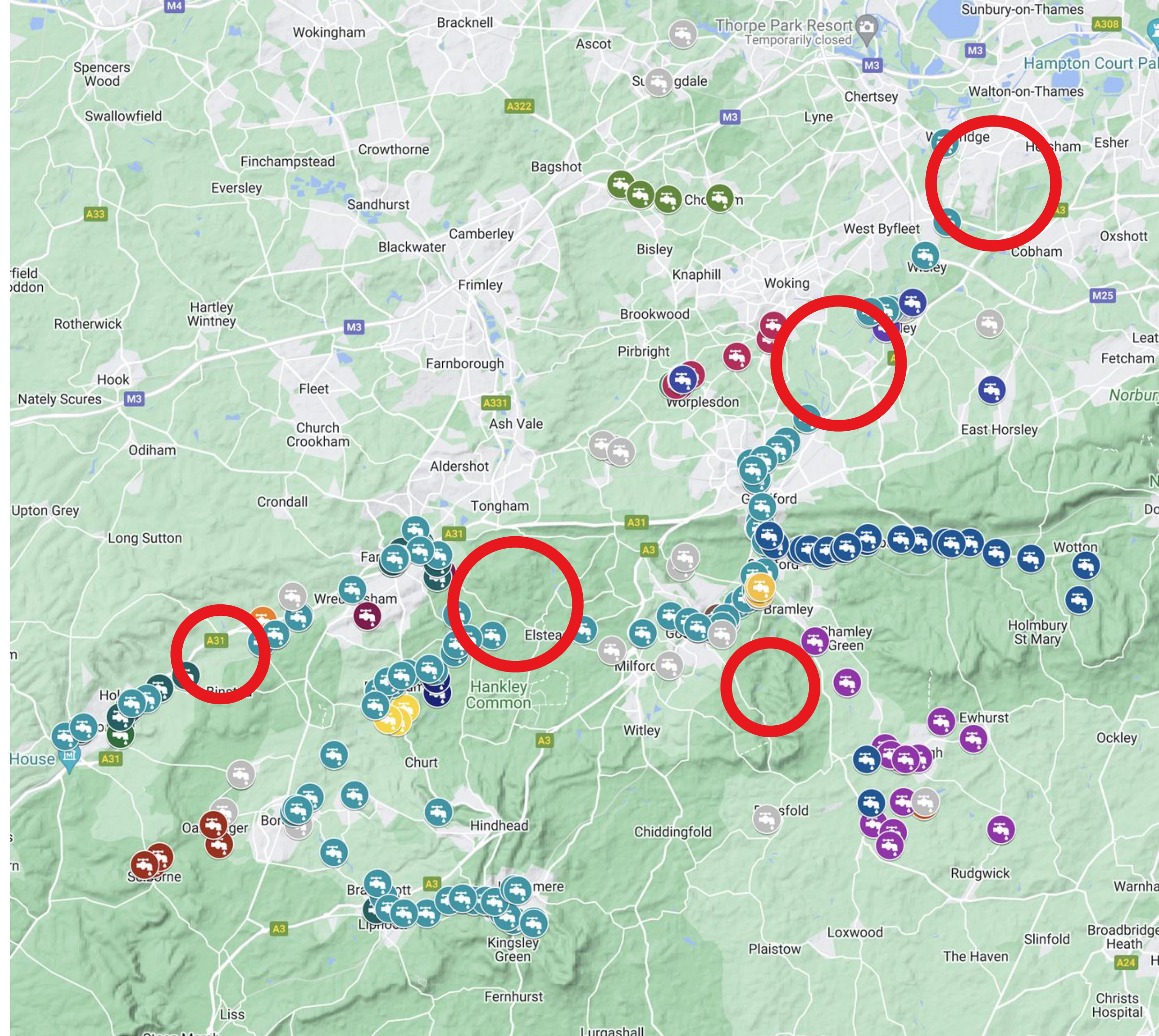


Mind the gaps!

We have still a great number of tributaries and other water bodies which are not tested regularly and some of our volunteers are looking at how we can shift our spots to more meaningful ones now that we have some baseline data.

We know there are a number of points of interest which need to be monitored.

We have plans to help improve and restore some of the river and will need help and funding to get those under way.





Our funders and supporters



Thanks!

This adventure in setting up water monitoring in the River Wey Catchment is the effort of so many. It's coordinated by Water Rangers, the River Wey Trust and ZERO Guildford.

Our heartfelt thanks to our funders and volunteers! Citizen science water monitoring is a collaborative effort. and we've been able to do so much thanks to the generosity of so many.

