Fauna & Flora

Saving Nature Together

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Communicating with StoryMaps

Showcasing conservation impact with interactive material

CHELSEA SMITH, FAUNA & FLORA

Fauna & Flora

Fauna & Flora is a nature conservation charity protecting the diversity of life on Earth. For the survival of species and habitats, the **planet and people**.

Fauna & Flora **supports, sustains, and strengthens** local nature conservation action around the world.

We work closely with **local conservation** partners to protect habitats, revive the ocean, stop extinctions, stop illegal wildlife trade, combat climate change and more. We use our collective expertise to inspire positive change globally.

How we work

We work alongside partners and local communities to develop conservation projects.

We have a lot of external communication needs, including reporting to donors, running community workshops etc.

We work globally with a wide range of people and skill-levels

Word, Slides, PDFs are the usual format but hard to make engaging.

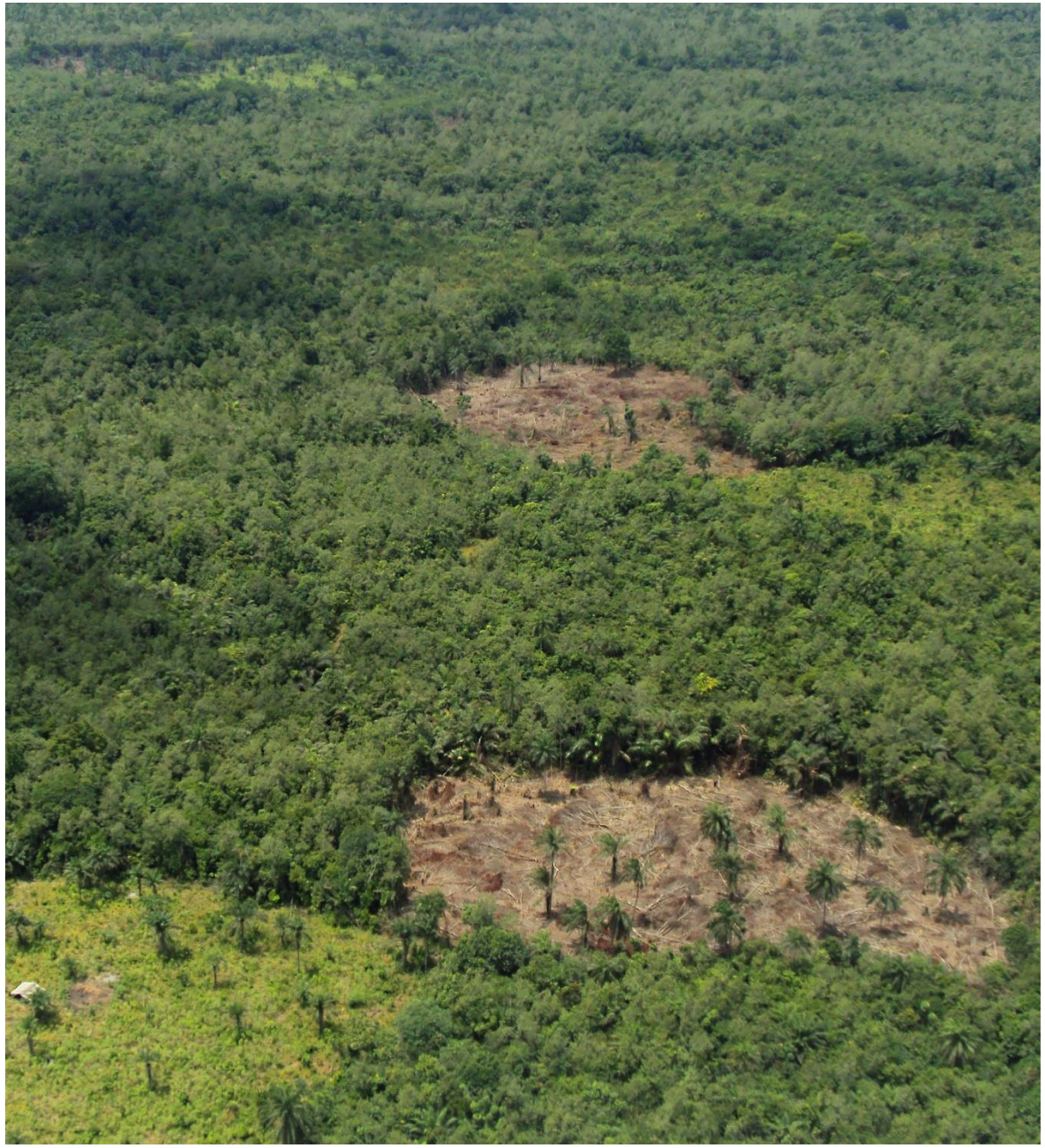
Conservation Technology at Fauna & Flora

Conservation is inherently spatial.

The conservation technology team support our in-country staff and partners to collect, analyse and communicate data.

Visualising our analysis is what makes it **impactful and accessible** to the people who need it.

ArcGIS's powerful tools allow us to produce high-quality publication-ready maps alongside engaging interactive online maps to **reach every audience we have**.



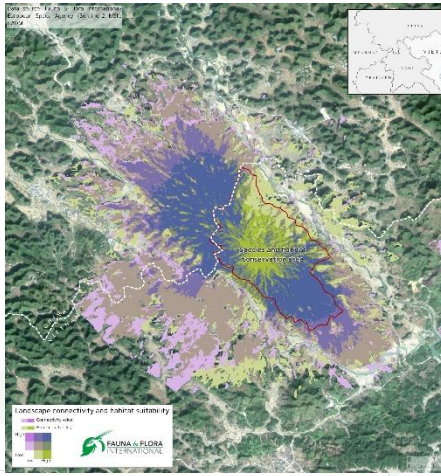
ArcGIS StoryMaps

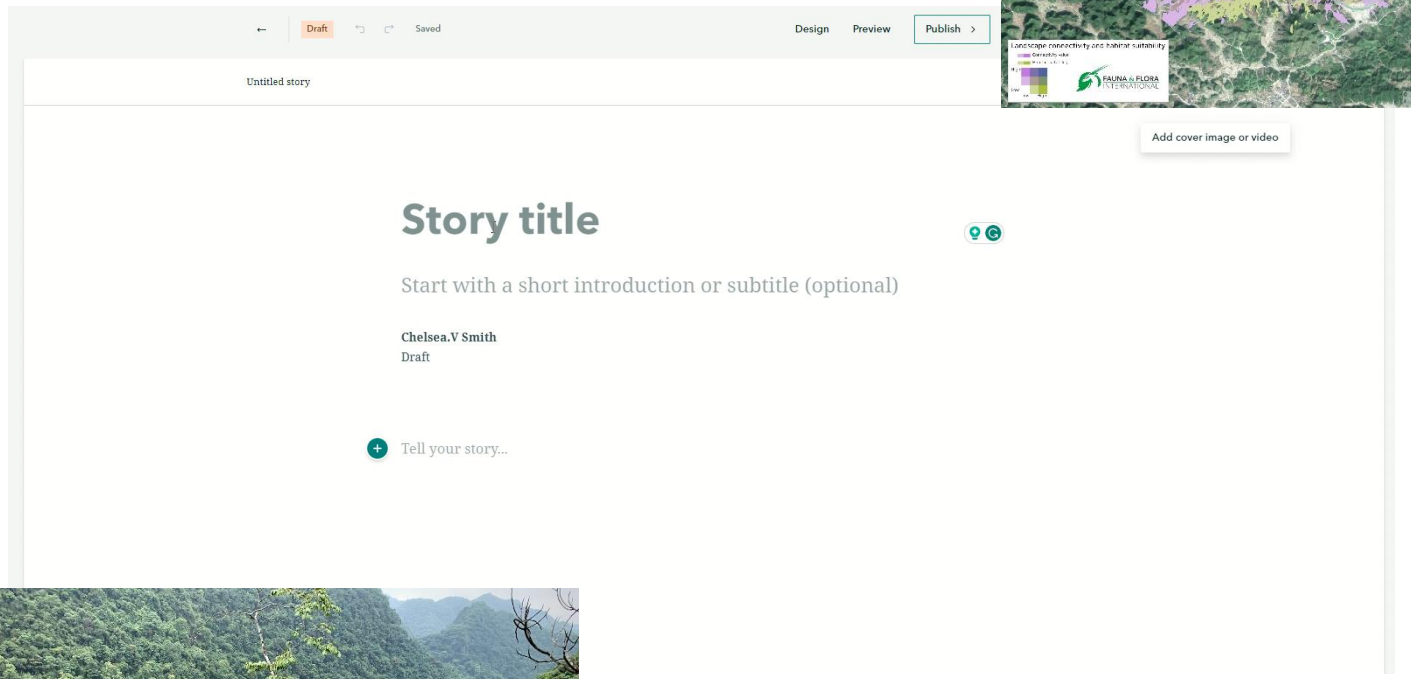
Communicating our work is fundamental to what we do

ArcGIS StoryMaps are a valuable communication tool

Easy to use drag & drop functionality promotes collaborative working

Immersive and dynamic mixed media helps break down the barriers to understanding our work





The Guardians of Cao Vit Gibbons

Unveiling the Extraordinary Efforts to Safeguard one of the World's Rarest Primates

Fauna & Flora

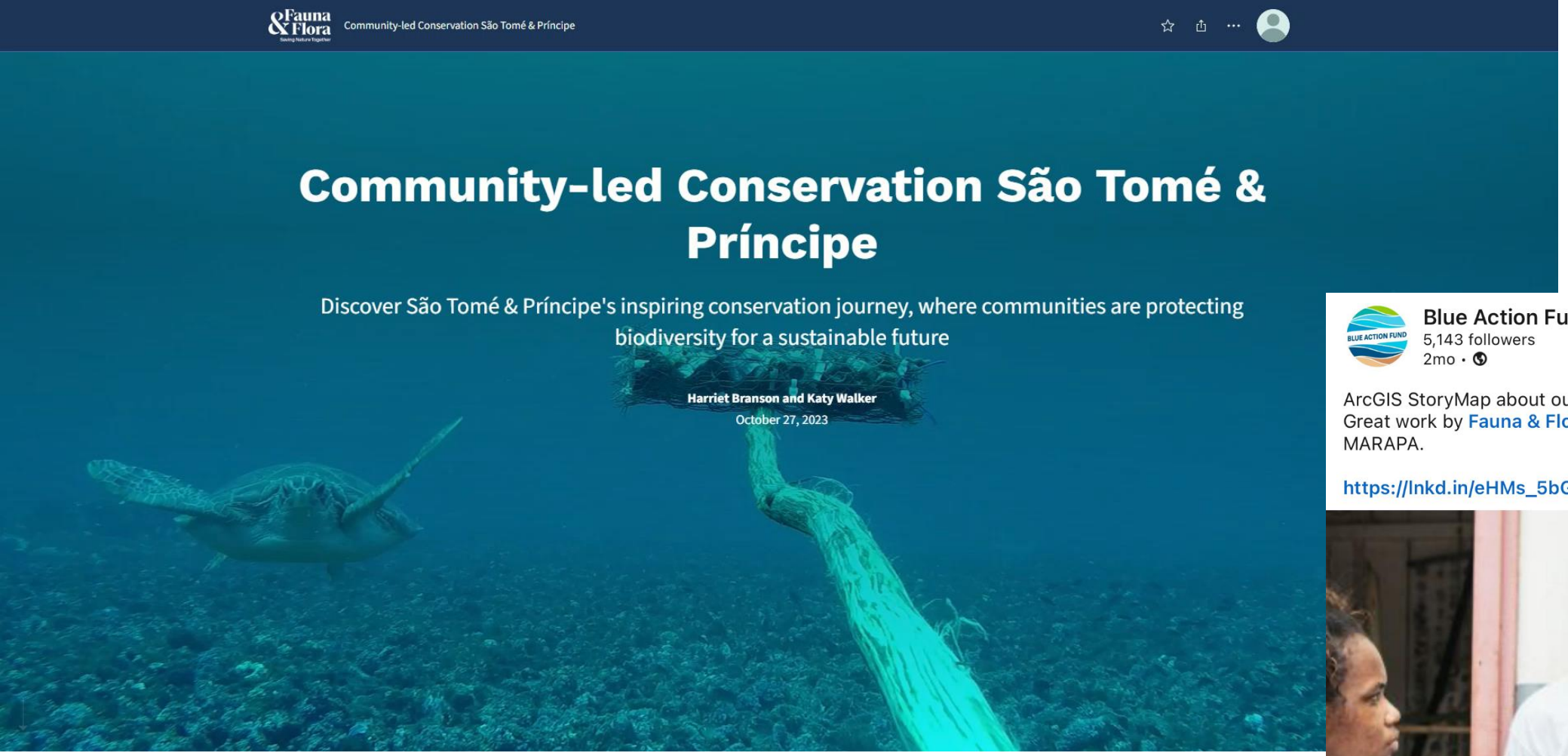
October 26, 2023

We have been wrestling with ***how to present all of this information so it is accessible to build on for practical conservation efforts*** *rather than languishing in dust-gathering reports.*

Enters ***ArcGIS' Storymap*** *which we have recently used to present crime script data and provide a very visual step by step account of commercial snaring and gun hunting in this area….*

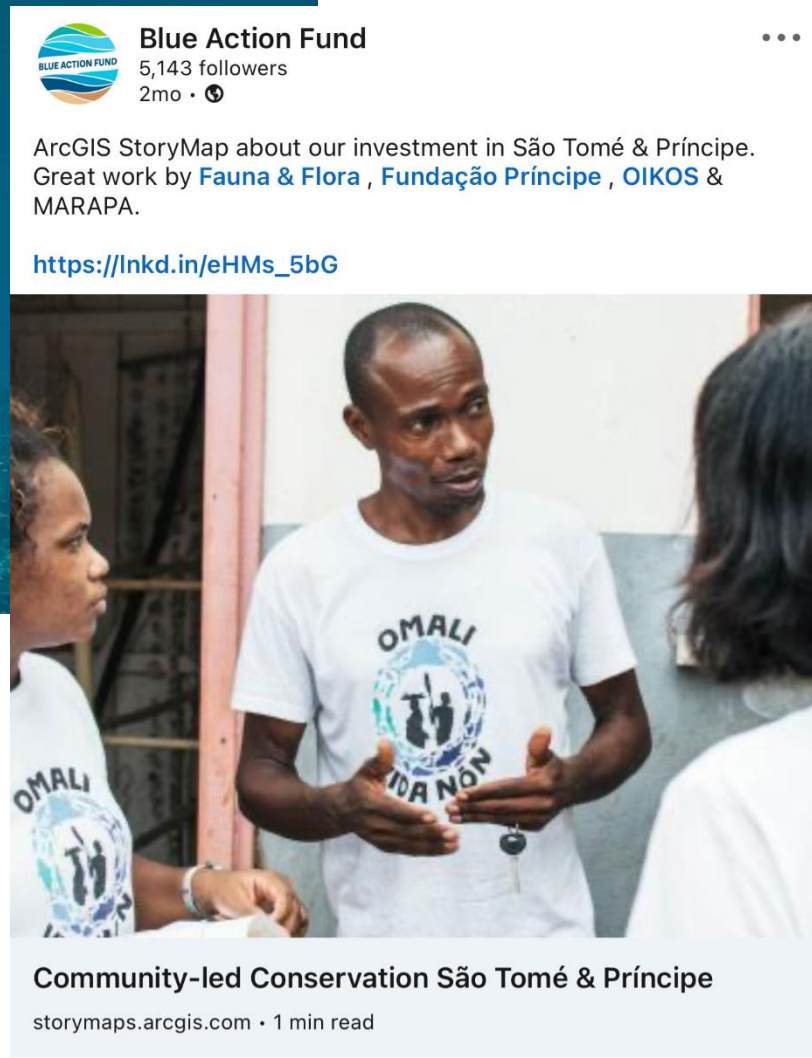
Field teams involved in patrols and government partners in Pu Mat seem to ***engage more actively*** *with the crime scripting information when it is displayed on maps and not just presented as a narrative. I'm noticing that there are more questions and remarks following presentations or during workshops involving maps*

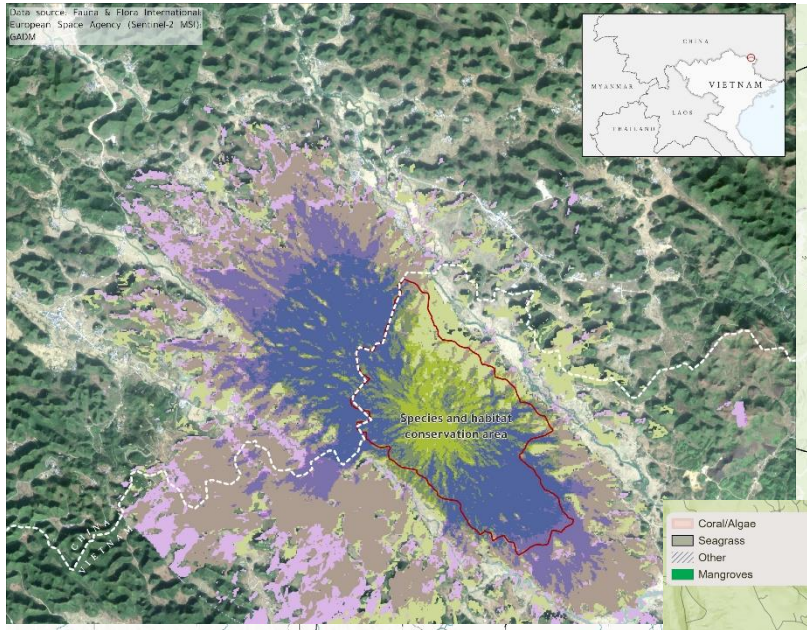
Laure Joanny, Senior Technical Specialist, Wildlife Trade

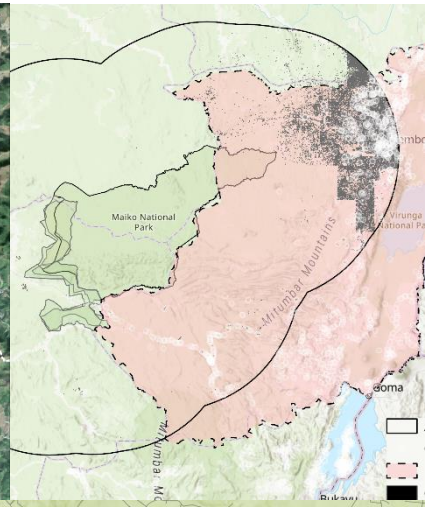


Story maps have helped engage local communities in our work and boost support of our projects

Story maps have helped us report to donors in new ways, which has been widely welcomed







Conservation Technology at Fauna & Flora

Supporting designation and design of marine protected areas in Sao Tome & Principe and Saint Lucia

Identifying mining threats in Maiko National Park in DRC

Identifying suitable sites for restoration to increase the movement of Cao Vit Gibbons

Modelling connectivity between game reserves in South Sudan

Internal and external capacity building, specific courses for GIS related to conservation

Thank you!

CHELSEA.V.SMITH@FAUNA-FLORA.ORG

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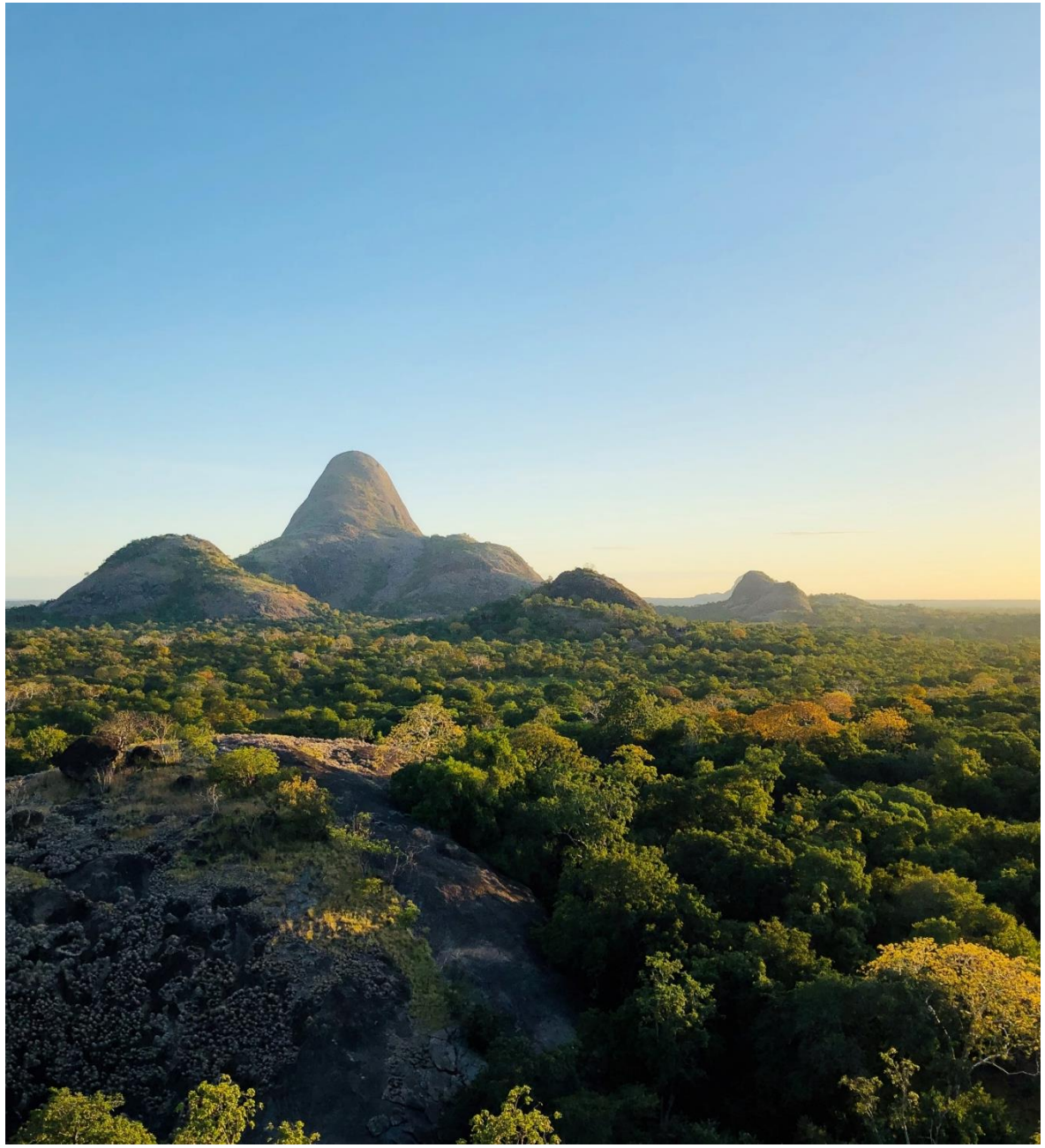


Scouts

Preparing young people with skills for life.

Oliver Eadsforth

Senior Data Manager

The Scout Association

Scouts

- Scouts is where young people make new friends, have amazing adventures and learn new skills.
- Every week we give almost half a million 4-25 year olds the skills they need for school, college, university, job interviews, giving presentations, overcoming challenges and achieving their dreams: the skills they need for life.
- Supported by over 150,000 dedicated volunteers, Scouts is currently undergoing its biggest digital transformation to date – enhancing the experience of our current volunteers and potential new recruits.

Scouts – Data and Insights team

Overview

- Part of the Data Team, formed in 2022. The Data and Insights Team was set up as part of our Digital Transformation Strategy

- A core element of Digital Transformation across Scouts is to make data more accessible and visible to our colleagues and volunteers – to use the power of our data

- With our new Volunteer Experience system – we aim to make it easier for new volunteers to sign up and to capture data throughout the volunteer journey

Understanding our Inclusive Growth

Challenges - the story

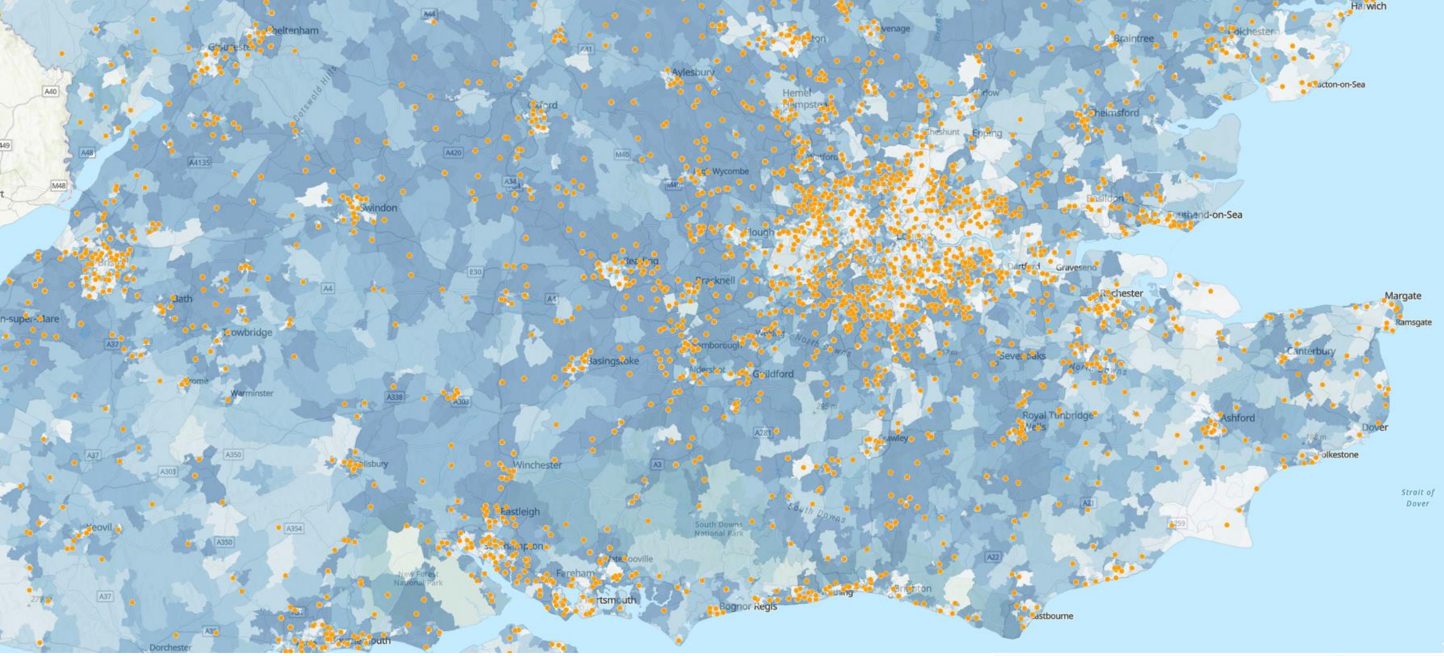
- COVID pandemic saw a significant drop in engagement – numbers of young people were down by more than 15% and adult volunteers dropped by 11%
- We launched a campaign to attract new volunteers to open and run sections for young people in Scouts
- Scouts' census data indicated that the demographic composition of our members' ethnicities was disproportionately low compared to representation in local populations across numerous areas of the UK
- As a first step, we launched Squirrels - new sections aimed at children aged 3-4 – enabling young children to join Scouts at earlier ages

Understanding our data

As early development, we started mapping out the data across our PowerBI suite – allowing us understand what our data is telling us.

We looked at:

- Demographics
- IMD (Index of Multiple Deprivation)
- Where we are opening sections
- Number of sections types within areas
- Sections which are missing Squirrels



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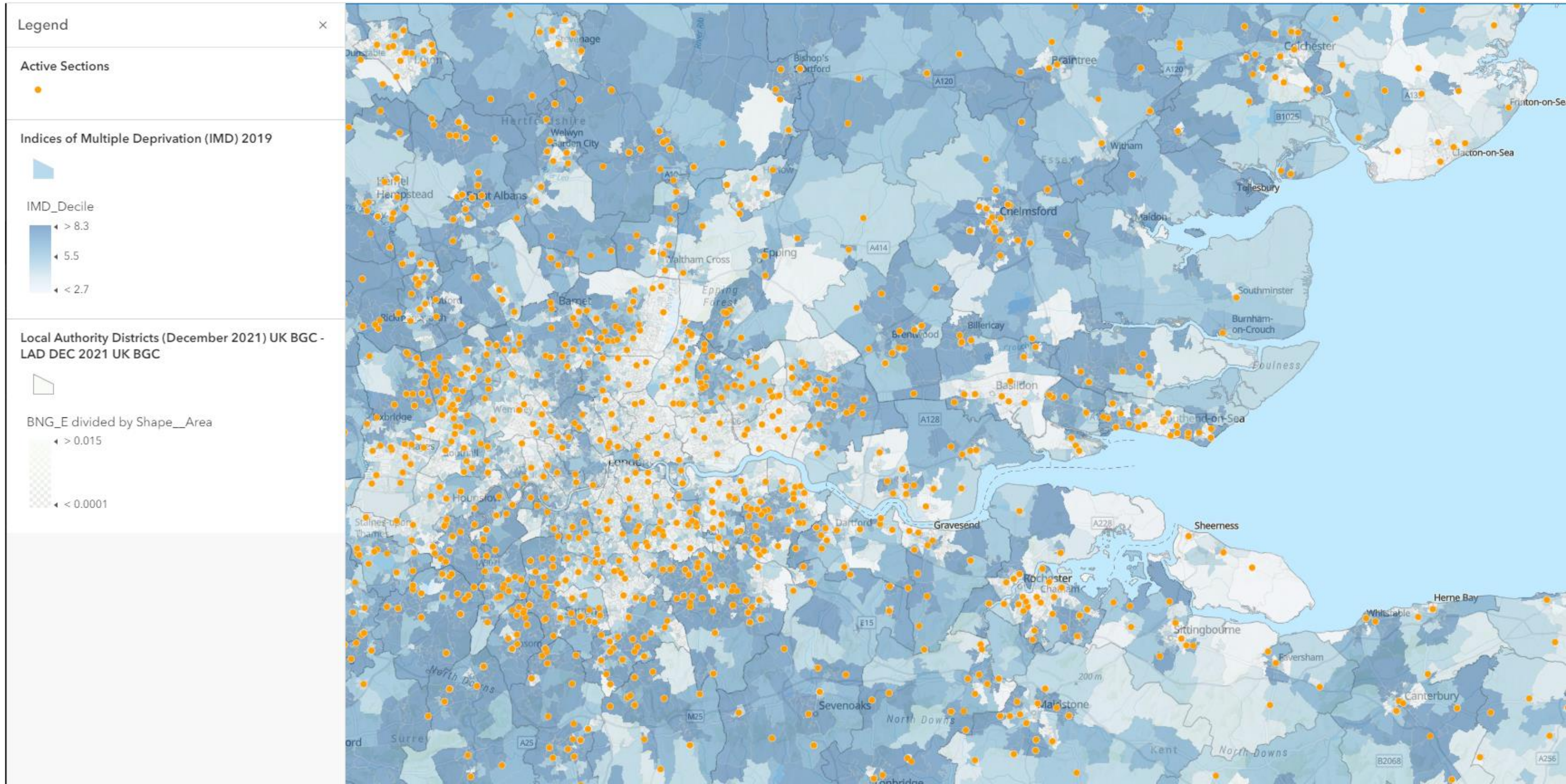
District	Barking, Dagenham & Newham
District ID	10,001,013
IMD	4249
IMD Decile	2
Latitude	51.53



The outcome

Visualisation tool supporting our Growth & Communities team identifying potential areas for growth and opening new sections.

We are continuing evolving the map and customising the data needed to be visible for our stakeholders to enable them to prioritise potential growth opportunities across their area.

We have used ArcGIS here at Scouts for less than a year – we want to ascertain and evolve our ArcGIS Services to reach out wider audience across Scouts.

Build on tapping into external data – including and not limited to: education data, schools data and free school meals.

- The number of children joining Squirrels has increased by more than 150% since 2022
- We are reaching and attracting more diverse communities of young people to Scouts
- Our new tools use data to identify and target recruitment
- We equip our Growth and Communities team with data to target potential areas of growth

Make all the difference.

Help young people across UK step up and dream big.

Scouts

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Scouts

#Skills for Life – Opportunities for Young People

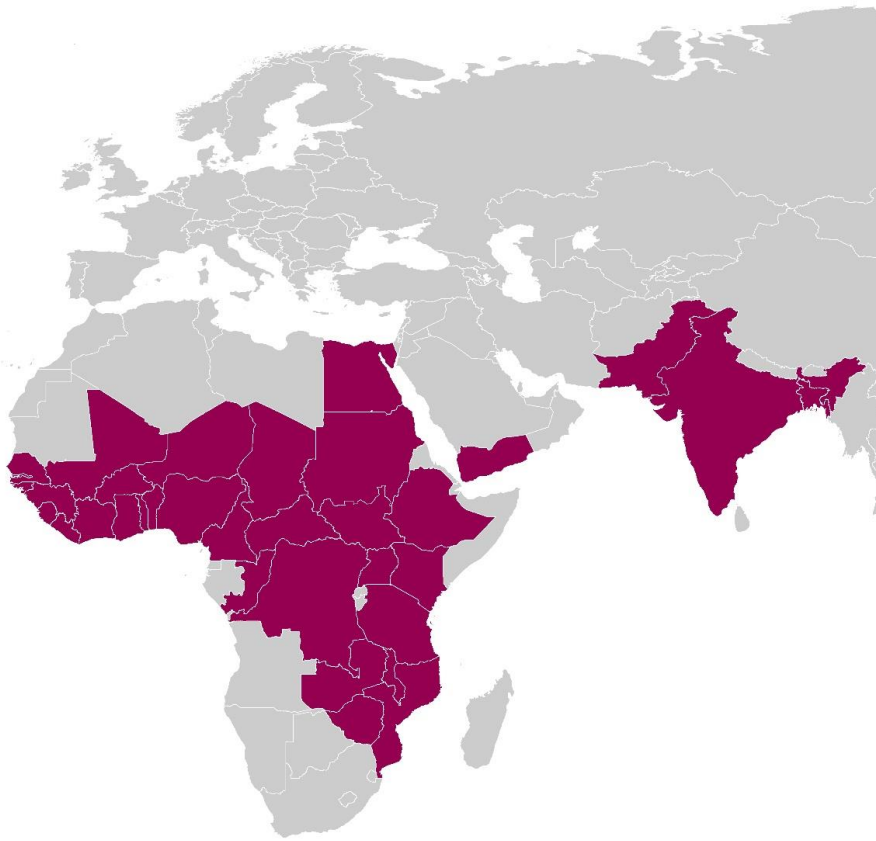
Using GIS to help eliminate eye diseases, Kenya

Alex Chailloux

Sightsavers

Introduction to Sightsavers

- Founded in 1950, Sightsavers works in over 30 countries
- Our vision is of a world where no one is blind from avoidable causes, and where people with disabilities can participate equally in society



Protecting sight

Fighting disease

Disability rights

Trachoma disease

- **Trachoma** caused by the bacteria chlamydia trachomatis, is spread by infected flies or contact with an infected person. Left untreated repeated infection causes scarring & inward growing eyelashes. With every blink the eyelashes scrape against the ball of the eye and can slowly and excruciatingly lead to blindness

More than 40 countries count trachoma as a public health problem

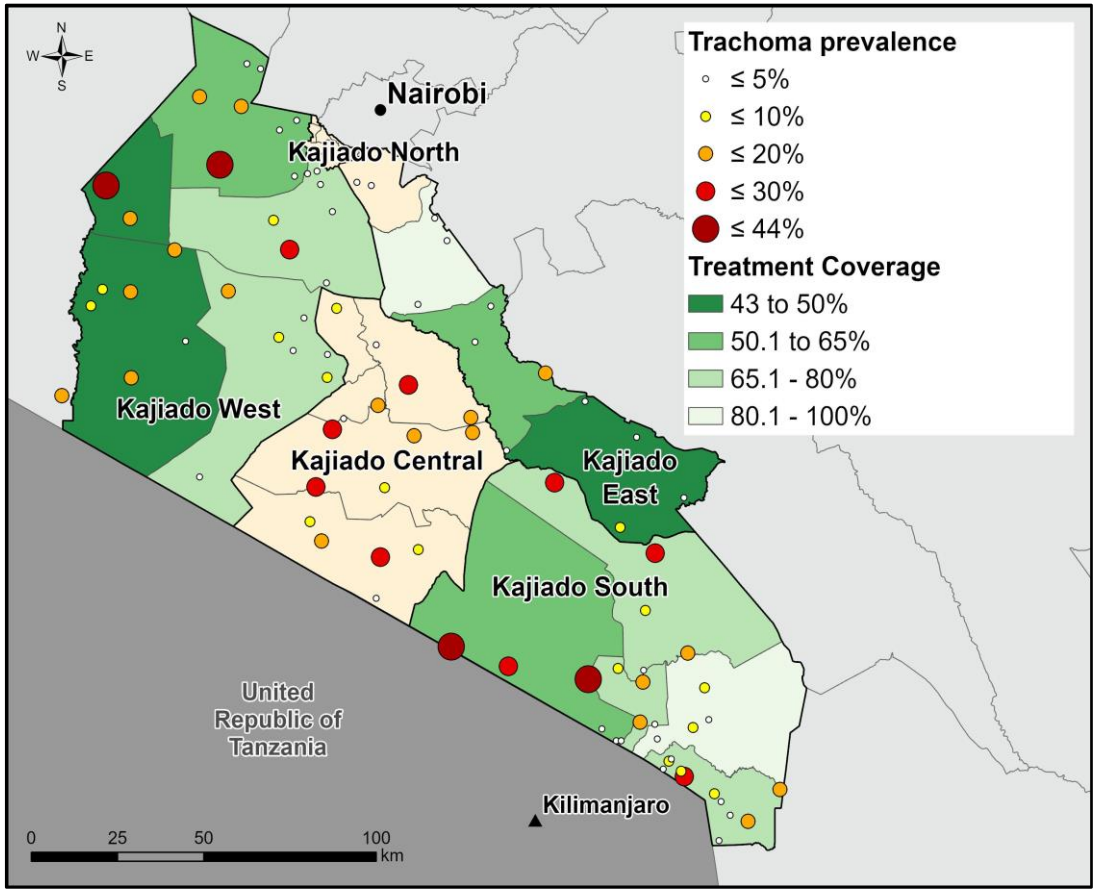
125 Million people are at risk of going blind from trachoma

1.9 Million people are blind or visually impaired from trachoma

Trachoma in Kajiado County- Kenya

The challenge

- **Treatments** provided during annual **Mass Drug Administration** and executed by **Community Drug Distributors**
- Trachoma is **endemic** in Kajiado
- **Maasai** Community (**pastoralism**, semi-nomadic Tanzania and Kenya corridor, **Bomas**)
- Trend in Kajiado: **Population based prevalence surveys is high** in 2021 and the **coverage is poor** compared 80% recommended (WHO)

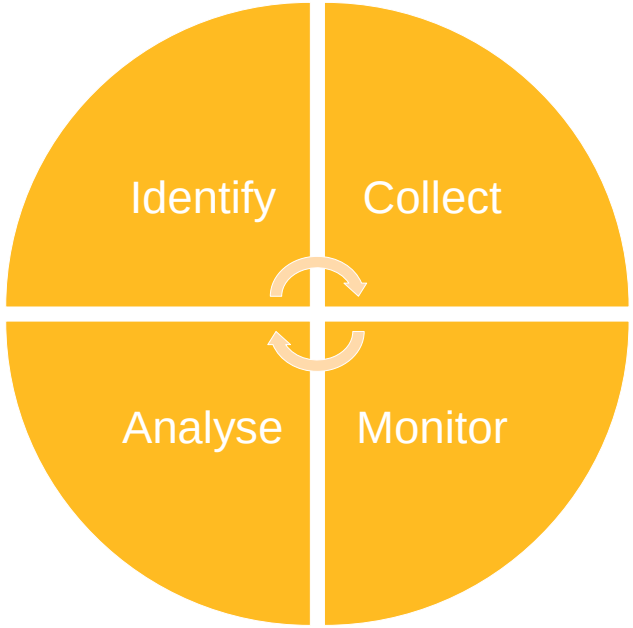


Sightsavers

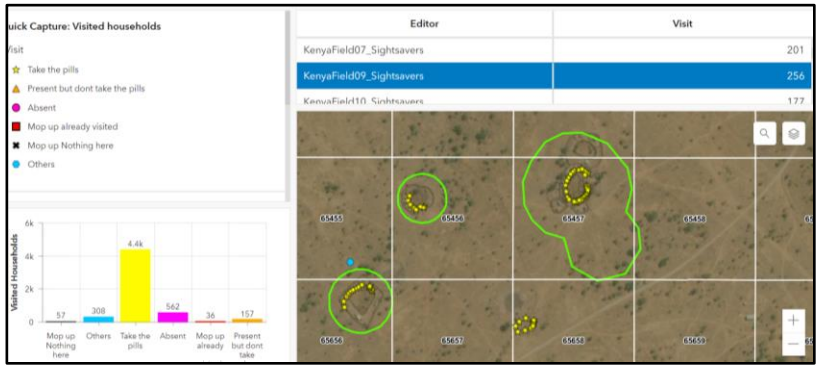
GIS to monitor in real time the drug distribution

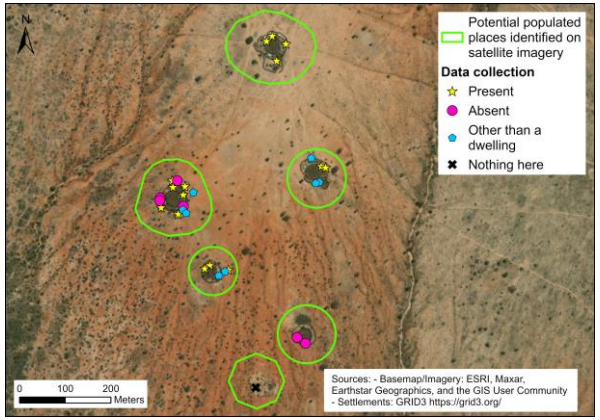
- **New in 2022: geographical analysis** to identify all potential inhabited areas on satellite imagery and collect GPS location of all the places visited by the drug distributors and monitor in real time the dispatching

Satellite imagery **Mobile survey App**



Dashboard **Map base App**





Sightsavers

Measurables

Improvements in the data collection 2022 to 2023

GPS points collected	From 2022 to 2023
Dwelling visited	41.6%
Other building mapped	958%
Grand total	191%

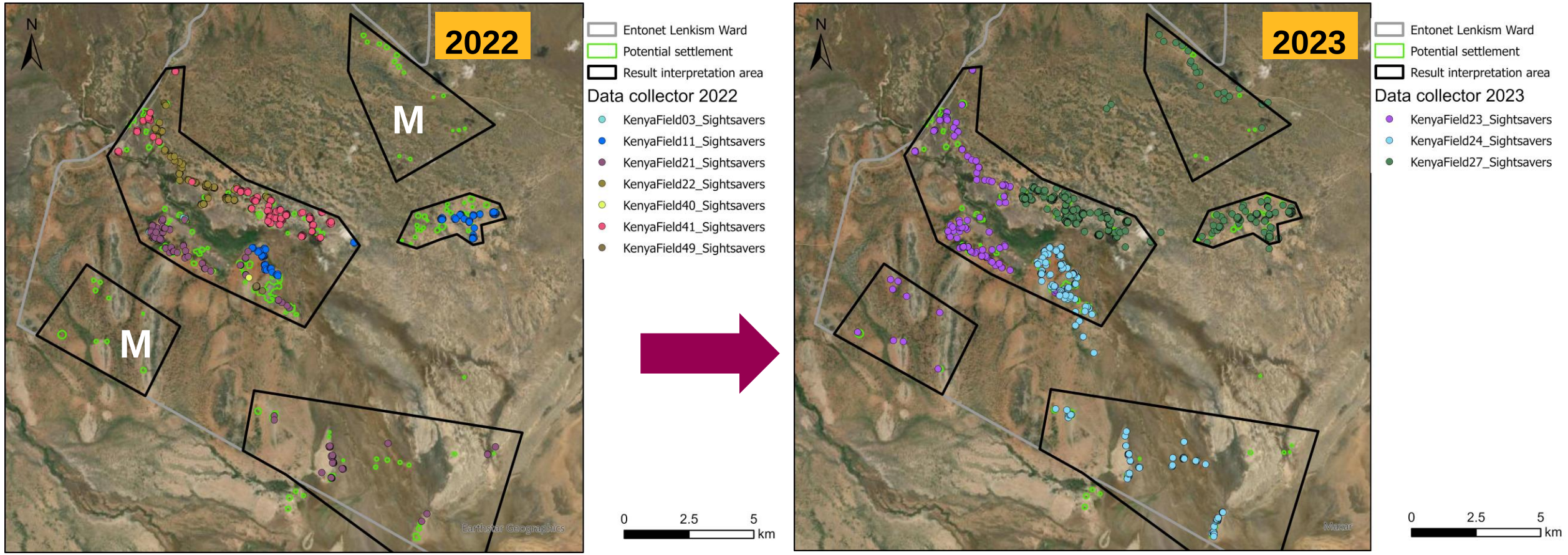
Drug distribution Effectiveness : Coverage Evaluation Survey

Year	Reference	CES results
2021	No technology	60%
2022	Year 1: GIS use	90%
2023	Year 2: GIS use	93.9%

James and Elizabeth, Community Drug Distributor, are photographed preparing azithromycin drug activity

- Digital tools supporting enhanced supervision and accountability of supervisors & timely oversight of the campaign, resulting in improvements in decision-making and ultimately improved MDA coverage

Improve the efficiency in the field



Sightsavers

Benefits & Challenges

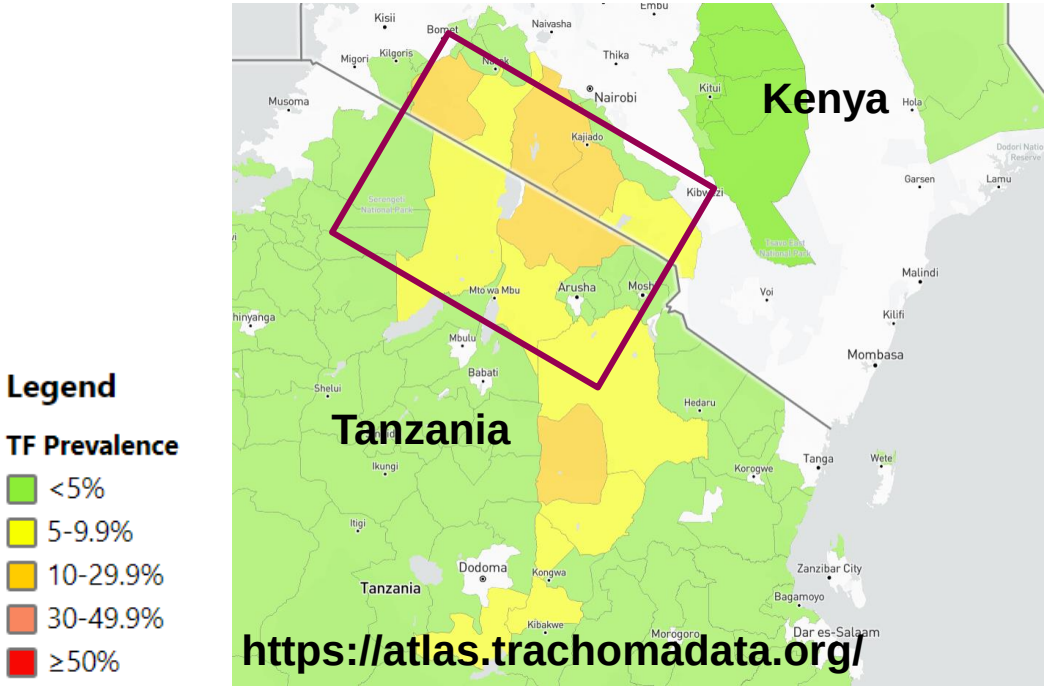
Investment in digital tools is worth it

GIS increased drug distribution coverage

Accelerated disease elimination results in better life opportunities for those affected

Next Steps: Cross border collaboration

- Ministry of Health drug distribution coordination across full Maasai territory (Tanzania / Kenya)
- Map the migratory patterns of the Maasai Communities to link with the epidemiology challenges and the annual distribution schedule
- Access to high resolution satellite imagery to extract and update new settlement locations



Sightsavers

Thankyou!

https://www.sightsavers.org/

achailloux@sightsavers.org

SightsaversUK

@Sightsavers

@sightsavers

SightsaversTV

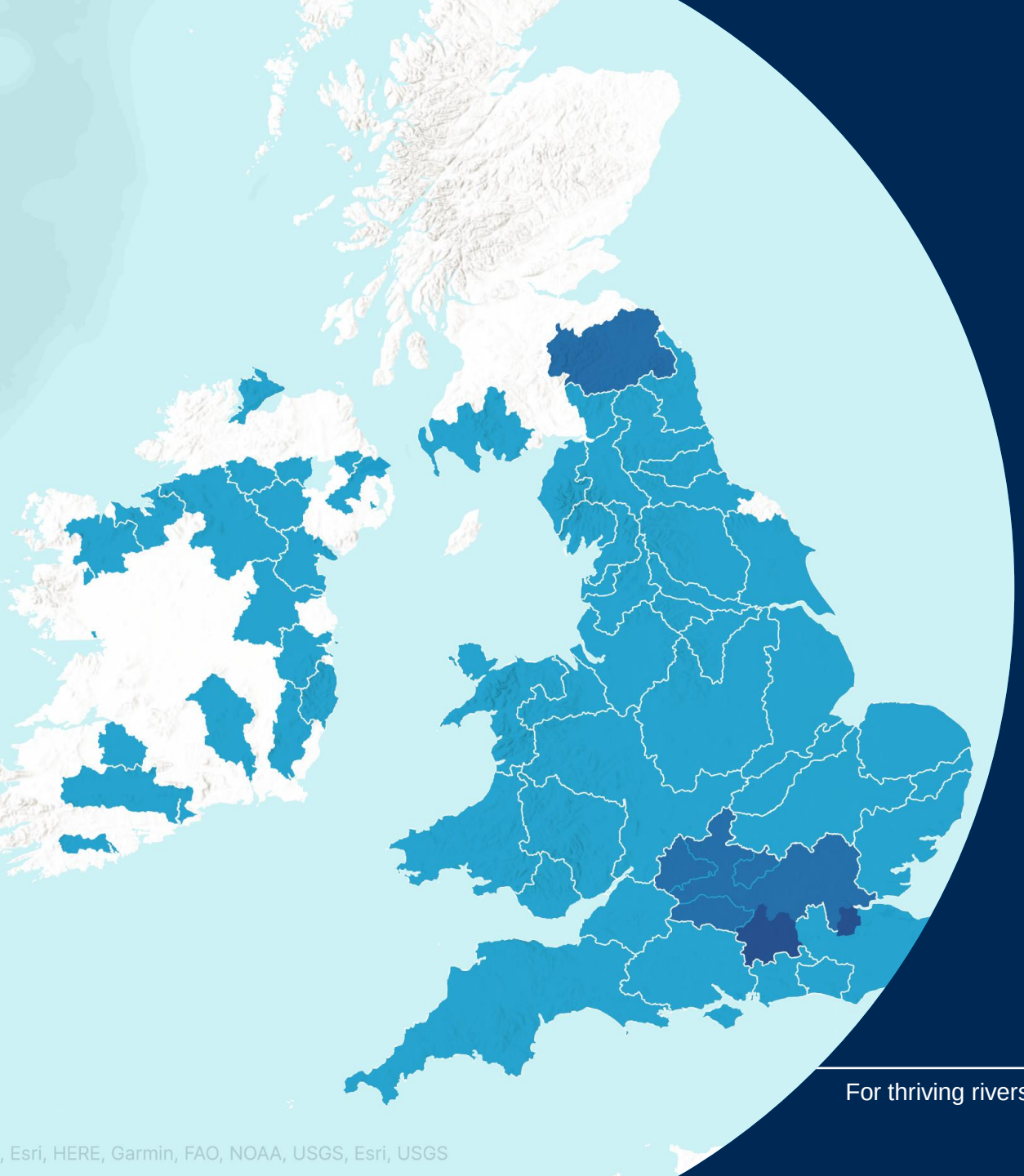
Sightsavers

Measuring your impact

Using Esri's digital mapping tools to collect citizen science data

Presented by: Anneka France, The Rivers Trust (anneka.france@theriverstrust.org)

Date: 29th February 2024



The Rivers Trust

Who are The Rivers Trust?

We are the umbrella body for 65 local Trusts

Each member Trust carries out fantastic work to help our rivers in their local area

In 2022-23, the Rivers Trust movement…

Inspired
26,326
school children

Engaged with
21,443
volunteers

Planted
340,623
trees

Installed
904
natural flood management measures

Worked with
4,478
farmers

Created or restored
619
hectares of wetlands

Delivered
496
river cleans

Completed
14
SUDS projects

Opened up
1,329
kilometres of river for fish passage

Erased, passed, or removed
105
fish barriers

Our priorities

Mainstream nature-based solutions

BRINGING LIFE BACK

into rivers and protecting communities from the impacts of climate change

Research and expose

POLLUTION SOURCES

and use targeted, expert-led advice to enable change

Grow our monitoring programme and

STANDARDISE DATA

on a national scale

Apply pressure and work with government and businesses to

ACCELERATE ACTION

to improve rivers

Plastic pollution in rivers – an evidence gap

As much as **80%** of marine plastics come from rivers

But over the past few decades data collection has typically been focused on beaches

Photo from Zena Holloway

Communities are more aware than ever about the issues with plastic pollution

and there are already lots of Rivers Trusts and community groups who are cleaning up their local rivers

But the litter keeps flowing…

Bristol Avon Rivers Trust

Jack Perks / Greenpeace

The power of data

Data driven campaigns can help to change business practice and government policy at a national level.

We needed to bring communities together to adopt a standardised approach to recording and reporting litter in rivers.

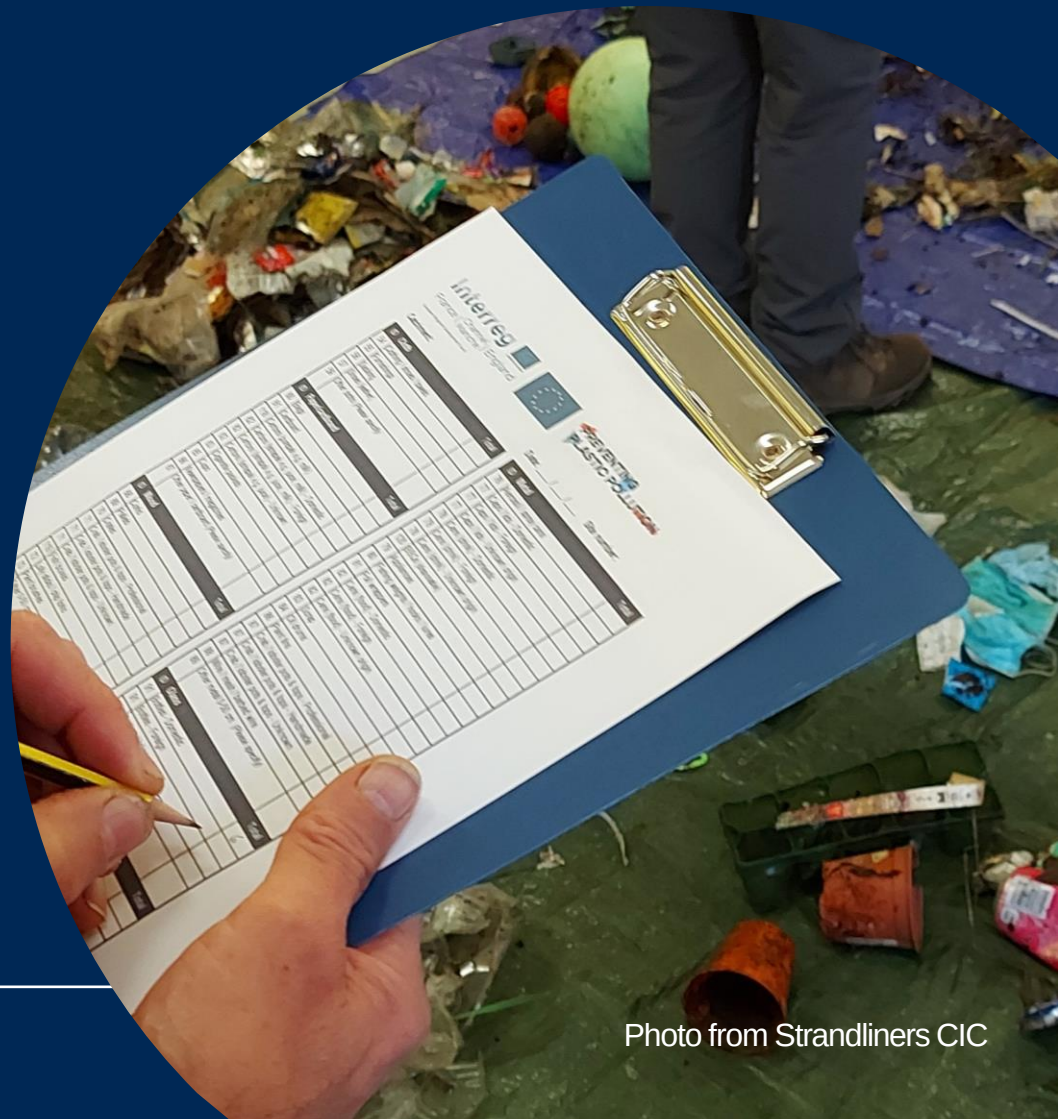


Photo from Strandliners CIC

Why did we choose ArcGIS software?

- We needed a **collaborative** solution – our pilot project involved 18 organisations across 8 river catchments
- Being able to **map** the data and identify potential sources was important for advocacy and targeted action
- Working with large numbers of volunteers so we needed a **user-friendly** interface
- We wanted to **empower** our local communities and give them full access to their data

Welcome to our citizen science hub

← Go back to our main website

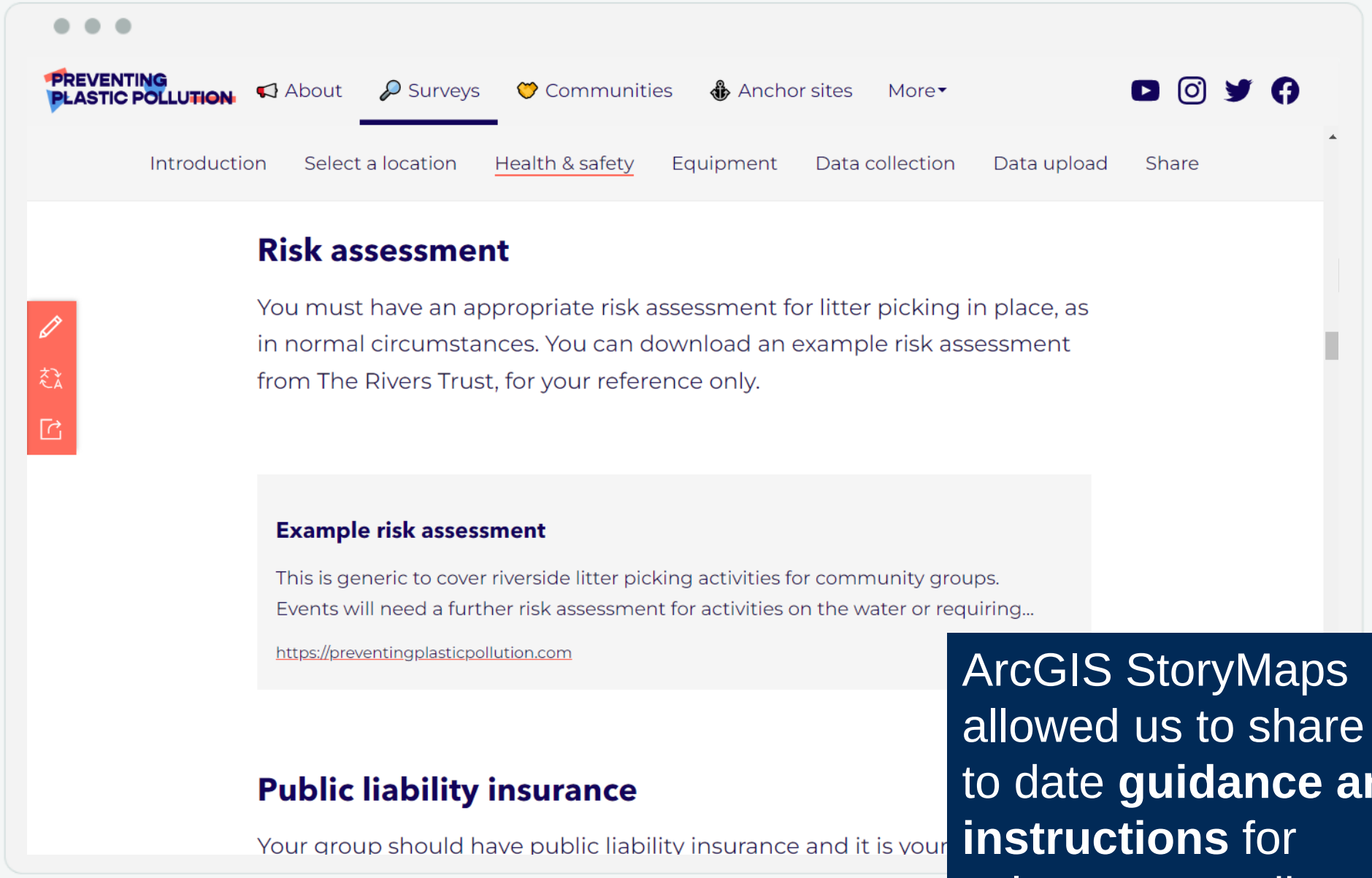
We're calling on organisations and community groups to help us collect data using the power of **citizen science**. We believe that we can better identify the sources and trends in plastic pollution, as well as other types of litter, by adopting a common methodology and a shared database.

Interreg France (Channel Manche) England
Fonds européen de développement régional

PREVENTING PLASTIC POLLUTION

The Rivers Trust

data.preventingplasticpollution.com



ArcGIS StoryMaps allowed us to share up to date **guidance and instructions** for volunteer coordinators

Interreg France (Channel Manche) England
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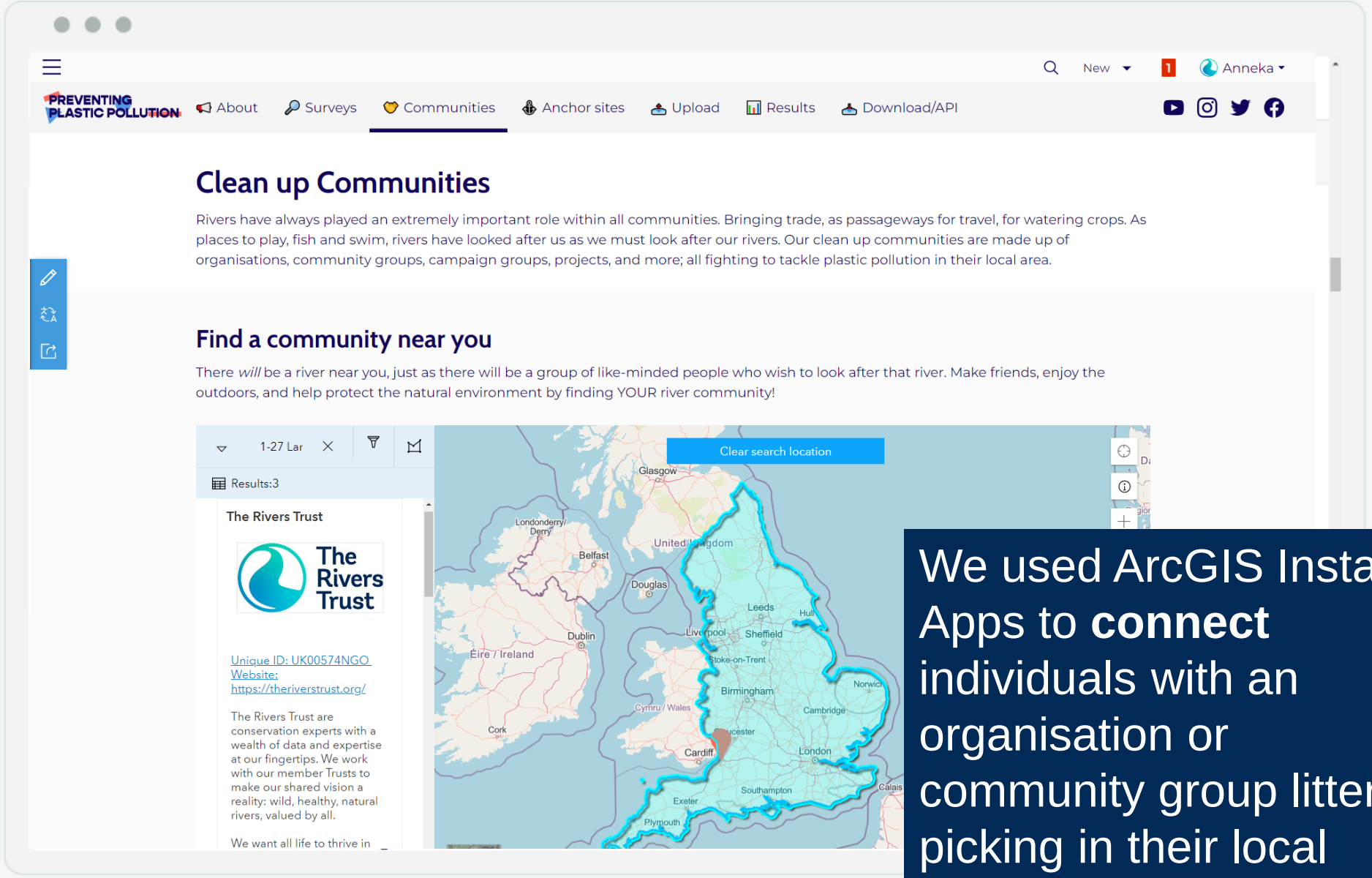
PREVENTING PLASTIC POLLUTION

The Rivers Trust

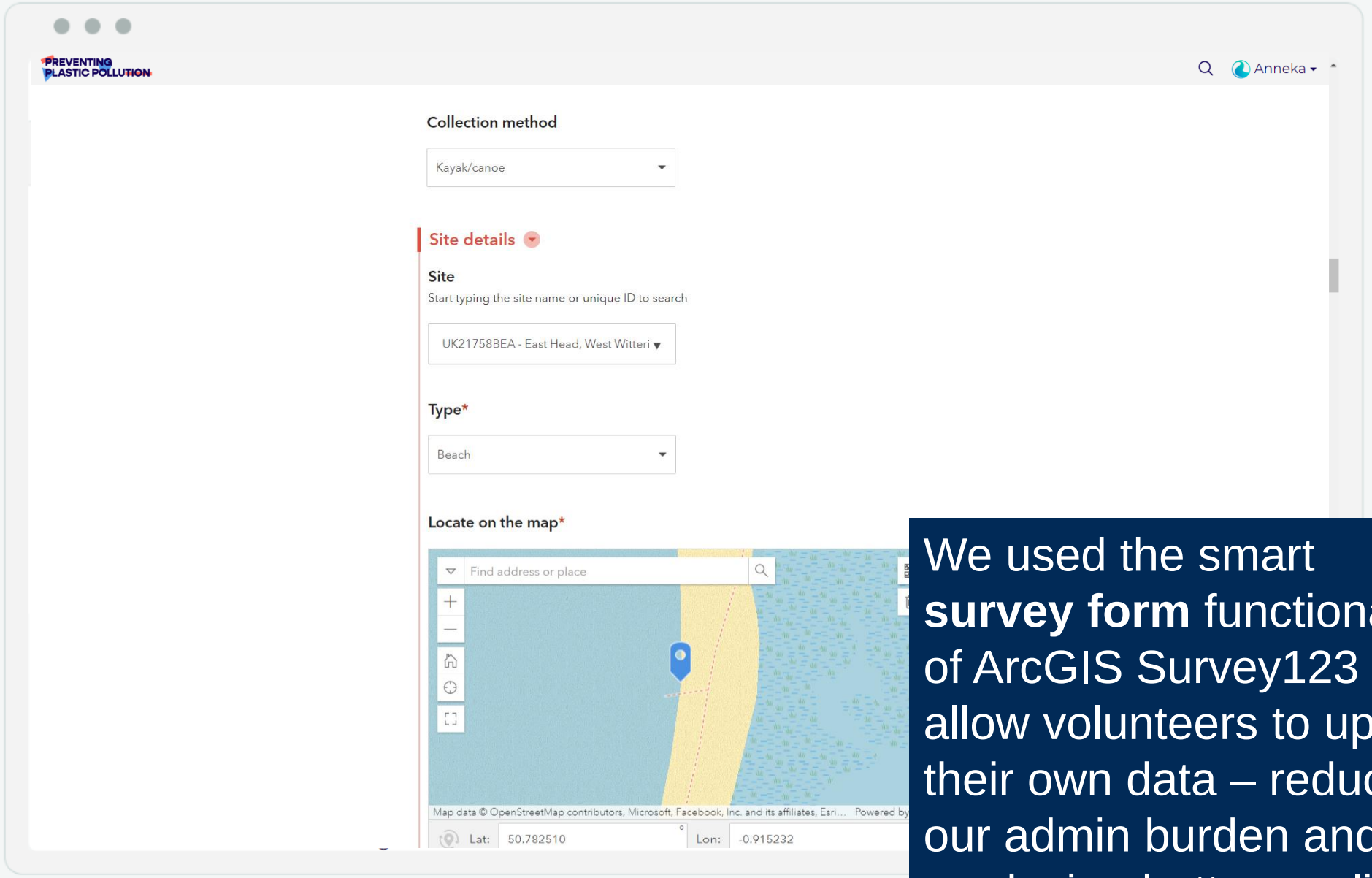


We used ArcGIS Instant Apps to **connect** individuals with an organisation or community group litter picking in their local area

Interreg France (Channel Manche) England
EUROPEAN UNION
Fonds européen de développement régional

PREVENTING PLASTIC POLLUTION

The Rivers Trust



We used the smart **survey form** functionality of ArcGIS Survey123 to allow volunteers to upload their own data – reducing our admin burden and producing better quality data

Interreg France (Channel Manche) England
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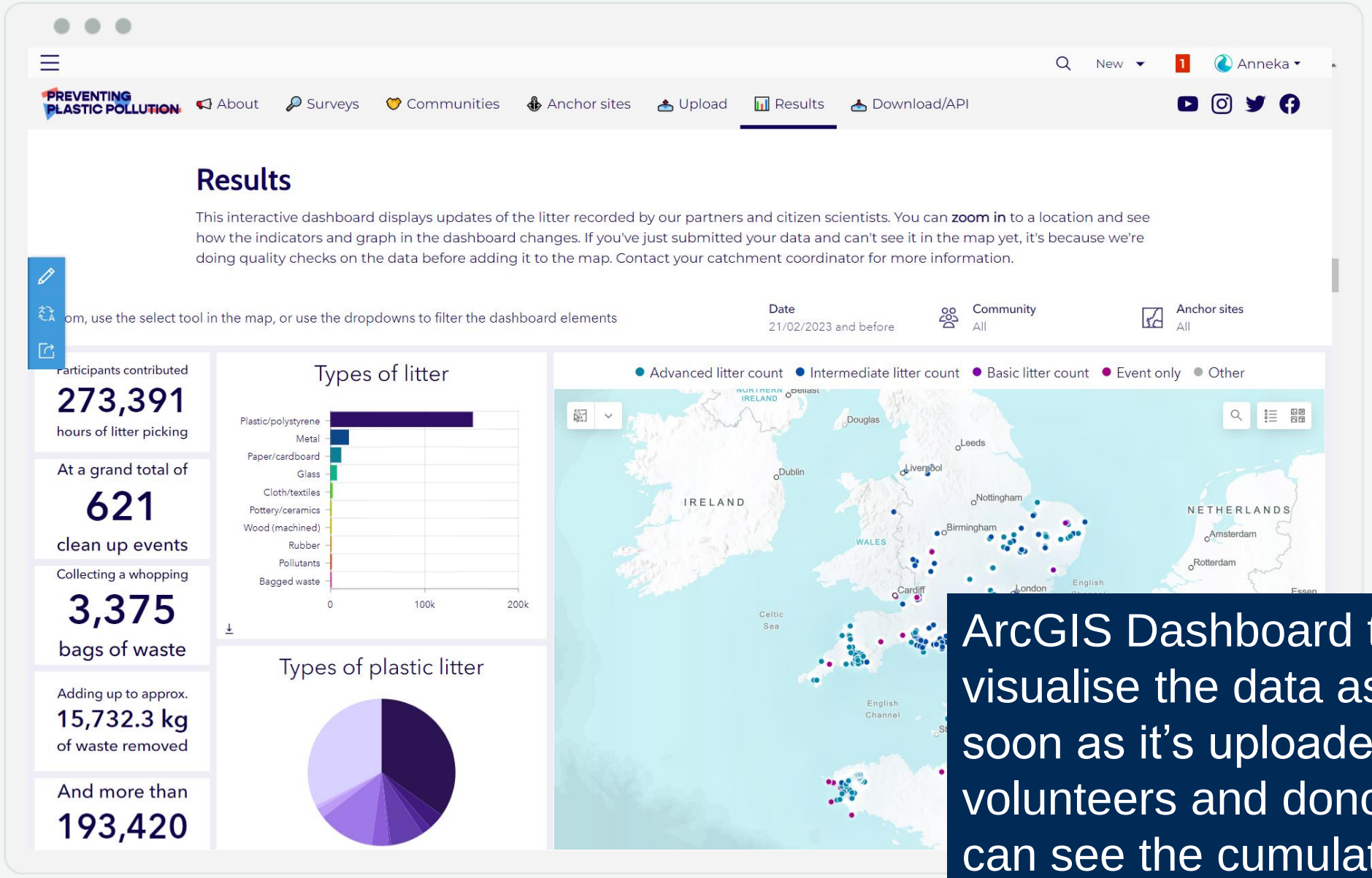
PREVENTING PLASTIC POLLUTION

The Rivers Trust

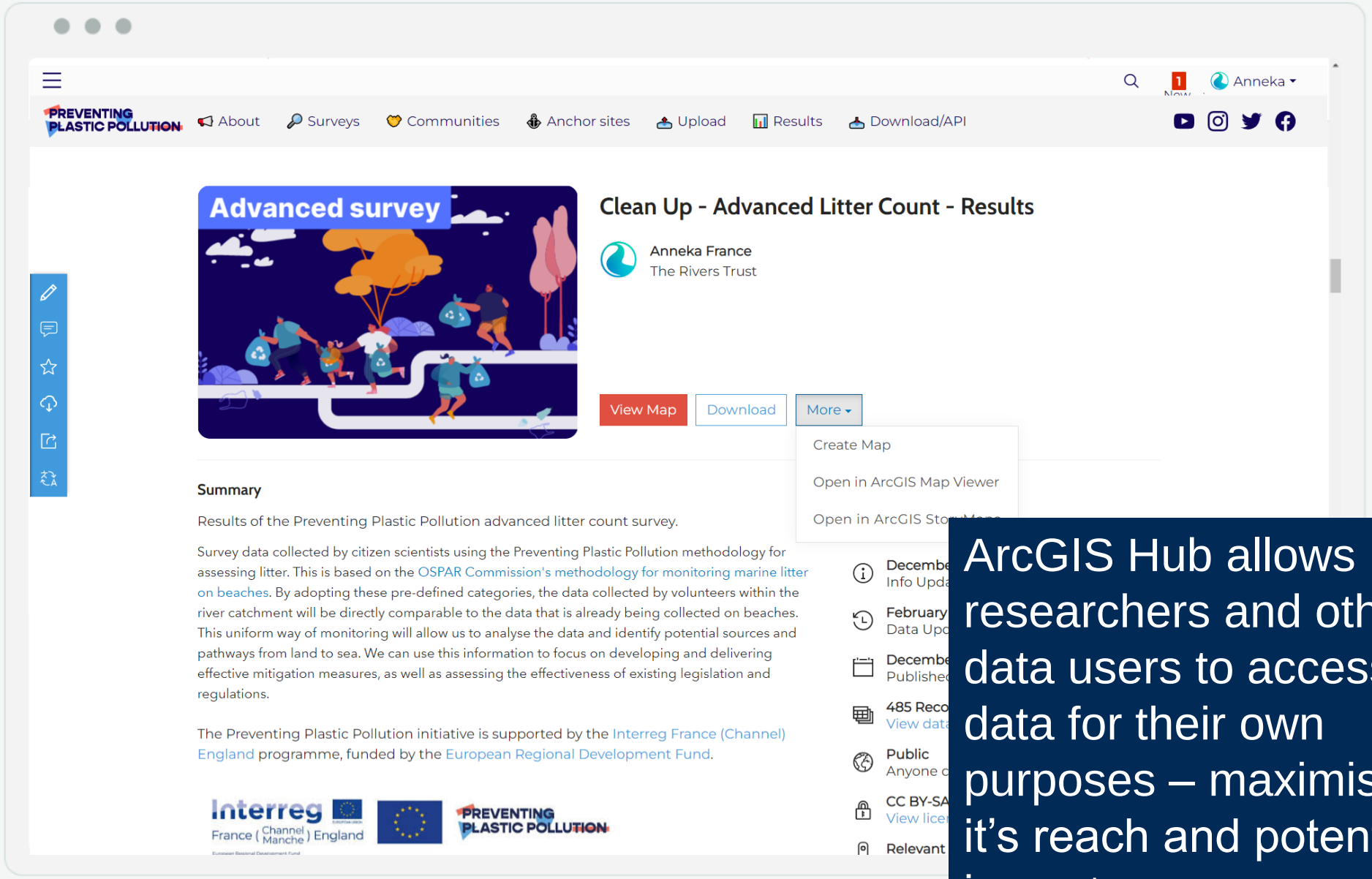


ArcGIS Dashboard to visualise the data as soon as it's uploaded – volunteers and donors can see the cumulative impact

Interreg France (Channel Manche) England
Fonds européen de développement régional

PREVENTING PLASTIC POLLUTION

The Rivers Trust



ArcGIS Hub allows researchers and other data users to access the data for their own purposes – maximising it's reach and potential impact

Interreg France (Channel Manche) England
Fonds européen de développement régional

PREVENTING PLASTIC POLLUTION

The Rivers Trust

More than

1,100

clean up events

A total of

380k

items categorised

A whopping

41,000 kg

of litter removed

What's next?

- Continue to grow our database - our pilot project has now come to an end, but many organisations and community groups are still uploading to our ArcGIS Hub site, and we're rolling out across more river catchments.
- Seeking funding to continue supporting the platform and collaborating with other organisations.
- We have a wider programme working on developing a standardised framework for freshwater Citizen Science and will be exploring how to maximise the impact of the data.

Thank you.

Find out more at theriverstrust.org

The Rivers Trust