

# Simultaneously improving the environment and population health Ribble Rivers Trust

# The Challenge

 Deliver focused projects to both regenerate the environment and improve public health

## The Benefits

- Clear evidence to support funding applications
- Projects prioritised in areas of greatest need
- Effective collaboration with a wide range of partners
- Dual objectives achieved with each project

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The Esri globe and Esri products, services and trademarks mentioned are trademarks of Environmental Systems Research Institute, Inc. Other companies and products mentioned herein are the property of their respective trademark owners. The environmental charity Ribble Rivers Trust has created an ArcGIS decision support tool that reveals where people have the poorest health and limited access to high quality green and blue spaces. Created in the format of an ArcGIS Story Map, this tool is now being used by a partnership of nine organisations in Lancashire to help them simultaneously regenerate natural environments and improve the health and wellbeing of people in local communities.

#### The Challenge

Based in the north west of England, Ribble Rivers Trust aims to improve rivers across the Ribble River catchment area for both wildlife and people. It recognised the huge strain that physical inactivity places on the NHS and wanted to do more to encourage people to get involved in local environmental projects as a way to exercise, meet other people and alleviate conditions such as obesity and depression. However, the charity didn't know which environmental improvement projects to focus on, in which locations, to have the greatest positive impact on the people who were most in need of help.

### **The Solution**

Initially, Ribble Rivers Trust used ArcGIS on the desktop to analyse open source public health and environment data for Lancashire. It identified key locations where people had health and wellbeing issues and where opportunities existed nearby to invest in environmental schemes that could positively impact these communities. "ArcGIS enables us to pull data and evidence together to target our efforts in those areas where they could provide the greatest benefits in a way that we just wouldn't be able to do otherwise," explains Ellie Brown, Strategic Evidence and GIS Manager at Ribble Rivers Trust.

When The Rivers Trust, the national umbrella organisation for river trusts in the UK, found out about the analysis work undertaken by Ribble Rivers Trust, it realised that the approach and resulting data could be useful beyond Lancashire. It therefore provided funding for Ribble Rivers Trust to extend its work to cover the whole of England. Ribble Rivers Trust published the results of this nationwide analysis on ArcGIS Online, creating a decision support tool in the form of an ArcGIS Story Map that is now freely available for anyone to use.

Since then, Ribble Rivers Trust has formed a partnership with nine other local organisations, including other environmental or public health organisations, local councils and landowners, and set up a project called Health and Environmental Action Lancashire (HEAL) to connect people with nature and improve the environment, specifically in areas where people have health disadvantages. "ArcGIS shows where local populations have real issues with health and wellbeing and inadequate access to green and blue spaces," Brown says. "It has really added value to the HEAL Project, enabling us to prioritise and adapt our environmental projects to benefit both the environment and local people."



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Clear evidence to support funding applications

Ellie Brown, Strategic Evidence and GIS Manager, Ribble Rivers Trust



The decision support tool, which hosts a range of health, wellbeing and environmental data to aid the planning of projects that address both health and environmental issues

The Benefits

The ArcGIS decision support tool provides an indication of where health inequalities and environmental issues overlap, giving organisations the evidence they need to justify new projects. The tool was used in the HEAL Partnership's successful bid for funding from the Green Recovery Challenge Fund, a government-led initiative that aims to support environmental renewal. This funding is now being used in multiple schemes, including a project at Pleck Meadows in Lancashire, where improvements to a wetlands environment are being implemented to simultaneously create habitats for wildlife, reduce flood risks and encourage local people to be more active outside.

# Projects prioritised in areas of greatest need

Critically, the ArcGIS decision support tool enables organisations to use data to prioritise where projects are most needed and where they could have the biggest impact on communities with poor health. The tool has, for example, been used to pinpoint schools in urban areas with limited access to green and blue areas for recreation and high levels of childhood obesity. The HEAL Partnership is now running 'Water and Wellness' sessions at these schools and encouraging teachers to take pupils to local parks and rivers to learn. The pupils are gaining health benefits from being more active, while picking up litter on walks and planting trees to improve their local environment.

# Effective collaboration with a wide range of partners

As the decision support tool is presented in an ArcGIS Story Map it is incredibly easy for people to explore the data, reveal patterns and find the evidence they need to inform their decisions. Organisations and community groups that do not use GIS can use the tool to view, understand and interrogate the same data as their partners. "Using an ArcGIS Online Story Map enables Ribble Rivers Trust to share data with partners who otherwise would have no way of accessing the data, and work collaboratively with a wide range of organisations," Brown says. "Collectively we can achieve so much more than if we were working in isolation."

# Dual objectives achieved with each project

The ground-breaking thing about the ArcGIS decision support tool is how it is enabling Ribble Rivers Trust and its partners to achieve dual objectives with each project: improving the health and wellbeing of local people and regenerating the environment. For example, the HEAL Partnership has organised woodland walks, during which people not only exercise but also collect tree seeds which can be planted in tree nurseries. The ArcGIS decision support tool is used to find ancient woodland where seeds can be collected from trees with a local provenance, close to communities with poor health and wellbeing, with paths that are accessible to people with different levels of mobility.

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