LeedsACTS! Seedcorn Funding 2023 'A Right to Greenspace'

FEDSAG

Fresh Water Quality Monitoring Gledhow Beck

#### Introduction

This Vignette describes the delivery and outcomes of the Fresh Water Quality Monitoring Gledhow Beck Seedcorn project. The project was delivered between July 2023 and August 2023 and funded by the LeedsACTS! partnership.

#### **Background - Overview of LeedsACTS!**

LeedsACTS! is a partnership between Leeds Beckett University, Leeds Trinity University and the University of Leeds, and the many voluntary and community organisations in Leeds. LeedsACTS! works to build closer relationships between researchers, students, charities, voluntary and community organisations to support joint work that benefits the communities of Leeds and to shape how the higher education sector engages with others in the city.

A core principle of our approach is co-production ensuring work develops jointly with mutual respect and learning.

The aim of the Seedcorn projects is to help stimulate collaboration. This may be achieved by:

- helping people to get to know each other better.
- identifying joint interests.
- developing/providing expertise that can be shared.
- raising awareness of the benefits of collaboration.
- helping to break down some of the barriers to joint working.

# Background - Overview of Collaborating Organisations

Gledhow Valley Woods forms a ribbon of woodland and grassland running for 1.5km through an urban area of north Leeds. We promote the conservation protection & enhancement of Gledhow Valley Woods for public benefit and nature.

We do this by:

- Protecting the woods natural beauty
- Maintaining & improving access & facilities
- Promoting biodiversity



- Increasing public awareness & education of the woods & their conservation & reflecting the opinions and concerns of the wider community
- Acting to prevent development where this may damage the woods or its value as a community amenity
- Working with all partners to enhance the woods

We were established in 1996 and work collaboratively with Wades charity (land owner) Leeds Parks & Countryside, and a wide range of other local partners. We undertake a wide variety of conservation activities during our monthly action mornings.

We deliver green activities for schools & the wider community, particularly disadvantaged groups.

Activities include Men's suicide prevention bushcraft, health & heritage walks, conservation activities with asylum seekers, Muslim youth & Asian dance sessions working in collaboration with Balbir Singh dance company and Leeds Association of Blind Asians.



We recently completed a project to restore Gledhow Lake. We have created 4 acres of wildflower meadow, maintained 200 bird boxes, planted 750 metres of hedgerow & delivered 1,450 volunteering hours in 2022. Water@leeds is one of the largest interdisciplinary centres for water research in any university in the world, encompassing expertise from across the physical, biological, chemical, social and economic sciences and engineering as well as the arts.

The water@leeds team comprises more than 200 professionals from across the different departments and faculties of the University of Leeds, ensuring a cross-section of expertise and different disciplinary backgrounds. water@leeds also has good links with industry and a track record of collaborative research and development, knowledge transfer and joint innovation. The central tenet of water@leeds is an interdisciplinary approach to understanding and hence solving major water issues.

### What is the Seedcorn Project?

• Recruit and train 5-10 community volunteers to develop skills to monitor water quality in Gledhow Beck and use existing water quality data. The beck flows through the Gledhow Valley, an important North Leeds urban green space.



- Raise awareness of the impact of poor water quality on nature and visitors among the local community, key local decision -makers, water regulators and Yorkshire Water.
- Identify and trial practical, low cost, natural methods of improving water quality in urban water courses.
- Establish links with other community groups working in this area.

The project/activity promotes collaboration between the TS and HEIs by supporting a co- produced project involving the friends of Gledhow Valley Woods and Leeds University.



# What does the Project do?

3 members of the FGVW project team attended a workshop at Leeds University that brought together academic staff and representatives from community groups working to improve water quality in communities across Yorkshire. This was very useful to learn from other groups' experiences. This was followed by a local workshop for potential volunteers, led by water@Leeds and attended by 24 local people to learn more about the local context and practical approaches to measuring water quality in the Gledhow Valley.

We subsequently recruited and trained 23 new volunteers and established 5 monitoring teams:

- Water quality monitoring
- E-Coli monitoring
- Invertebrate Kick sampling
- Land drain monitoring
- Lake outfall monitoring

These teams now undertake monthly or bi- monthly testing to evaluate the impact of sewage discharge, road run off and misconnections to land drains on water quality in Gledhow Beck. A sixth group is exploring the potential for opening up or daylighting culverted sections of the beck which would bring about major improvements to biodiversity in this green space.



## Achievements and Key Outcomes

- Established 5 self-sustaining teams to monitor and report on water quality in Gledhow Beck.
- Received invaluable support from water@leeds to help us better understand the issues impacting on urban water quality and technical support to set up the teams.
- Established a dialogue with both Yorkshire Water, the Environment Agency and local politicians using the data we will be gathering to press for sustainable improvements to fresh water quality in the Gledhow Valley.



- Made connections with another local group monitoring water quality and exploring opportunities for collaboration (REAP – Roundhay Environmental Action Project)
- On-going technical assistance and support from water @leeds, including data analysis. In turn, FGVW will offer placements and host visits from water @leeds students.
- Water@leeds are developing a handbook for community groups wishing to monitor water quality in their local area.

# What went well

We have enlisted a large pool of talented and enthusiastic individuals from the local community who are passionate about improving the natural environment.

We have drawn community attention to the state of Gledhow Beck and commissioned an information board telling the story of Gledhow Beck and the challenges it faces.

Built up good collaborative working with both Leeds and York universities to enable us to seek funding to undertake longer-term, co-produced research into water quality issues and how to bring about improvements.

Gained the support and engagement of local councillors.



The collaboration with water@leeds was included in an article published on their website <a href="https://water.leeds.ac.uk/news/from-running-rivers-to-retreating-glaciers/">https://water.leeds.ac.uk/news/from-running-rivers-to-retreating-glaciers/</a>

### Wider Impacts

To date, we have received £500 of additional funding from Earth Watch / Water Watch, along with 20 additional water testing kits to extend the monitoring for a further 12 months. We will also receive expert input to ensure we maximize the effectiveness of our monitoring by targeting messaging to key decision makers and training for our project managers. Our monitoring information will appear on both the water watch and water rangers open data bases and form part of an international water quality monitoring network. We have recruited a volunteer data manager to support this wider dissemination.

## **Challenges and Barriers Faced**

The project would have benefitted from a much longer timeframe.

We found it has taken longer than expected to set up workshops, train volunteers and begin collecting data.

# **Future Potential and/or Impacts**

We intend to continue to build on the strong relationship that we have built with water@leeds and explore opportunities for other collaborative working.

In September, we will be submitting a joint funding application with water @leeds and York University to the NERC Engaged Environmental Science call to co-create a citizen/scientist partnership that addresses public concerns on the environment and improves water quality for the benefit of the biodiversity of Yorkshire rivers.

This will be a 4-year citizens science project working with a number of community groups across Yorkshire to address water quality concerns.

# Contribution to Collaboration between the Third Sector and HEIs for the benefit of the communities of Leeds

Collaboration: enabling communities to produce solutions, building research skills, use of data, documenting changing lives, understanding impact, influencing



commissioning, smarter use of technologies, understanding policy change on communities, linking community networks.

We have trained 23 volunteers to collect water quality data as well as learning from the experience of other groups doing similar work. We have built up strong collaborative working relationships with both Leeds and York universities, as well as NGOs such as Earth Watch, River Rangers, REAP and the Aire Rivers Trust.

These collaborations and the data gathered will be used to influence policy makers, regulators and increase awareness among the local community of the issue of water pollution.

# **Concluding Remarks**

This citizen science project would not have been possible without the support and expert assistance of water@ leeds. They were able to harness staff, Postgraduate students and external partners to support the project. The FGVW was also able to build on its strong local support and expertise to ensure delivery of the project.

This is an ongoing project that will show its true worth when we have collected several months of data to make a strong case for water quality improvements to Yorkshire Water and The Environment Agency.

# **Beneficiary Evidence and Feedback**

D is a 75-year-old male who has found a new interest in coordinating a group of volunteers undertaking water quality monitoring. The new role and responsibilities have led to improvements in both his physical and mental health, and he feels more connected to the local community.

S is a 17-year-old female A level student studying biology, which she wants to study at university. She feels strongly about the state of local rivers and becks and wants to make a difference. The water quality monitoring group has enabled her to do this and motivated her to explore further the issue of environmental pollution during her degree.

L is a 45-year-old female who lives close to one of the polluted land drains in Gledhow Valley Woods. She has wanted to get involved in the work of the Friends of Gledhow Valley Woods for some time but her work in social care involving shift work and lack of information on volunteering opportunities have prevented her from doing so.



L has found that she can fit her monitoring work around her other commitments. Her local knowledge has proved invaluable and she has become a very active member of the project.

Wider community benefits resulting from the project will increase as data from the water quality monitoring work is shared with the local community and key decision makers and is used to make the case for improvements to water quality in Gledhow Beck.

Social media feedback indicates that we have broad support from both the local community and local councillors.

