

Building Oxfordshire's Freshwater Network: Engaging People in Nature's Recovery



1. Building Oxon Freshwater Network Project Team at Lye Valley by Tony Gillie

Evaluation and Legacy Report 2022-23



Acknowledgements

We are very thankful to the tremendous support our partner organisations, landowners and local experts have provided during The Building Oxfordshire's Freshwater Network Project. A special thanks must go out to the wonderful volunteers who continue to help us protect, monitor and restore the amazing wetland sites in Oxfordshire and the amazing volunteers and community groups who supported our GroWet project.

We particularly thank our funders:

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- Thames Water
- Green Recovery Challenge Fund
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We would also like to acknowledge the support of our external evaluator Heritage Insider who have guided us through the evaluation process and kept us on track, and Sophie Button our National Lottery Heritage Fund Case Officer.

The project was completed in partnership with the following organisations, and land managers:

- Ashmoleum Natural History Society
- Bucks and Milton Keynes Environmental Records Centre
- Buckinghamshire County Council
- Earth Trust
- Environment Agency
- Friends of Lye Valley
- Lofthouse Wildlife
- National Trust
- Natural England
- Nicole Clough
- Oxford City Council
- Oxford Direct Services
- People in Action
- Royal Society for the Protection of Birds
- Thames Water
- Oxford Botanic Garden
- River Thame Conservation Trust
- Thames Valley Environmental Records Centre
- Thames Valley Wildflower Meadow Restoration Project
- BBOWT
- Oxfordshire Libraries
- Florence Park Community Centre
- South Oxford Community Centre
- Oxfordshire Flora Group
- Helen Edwards
- Oxford Urban Wildlife Group (Boundary Brook Nature Park)
- Fusion Arts
- SciPo
- Hinksey Heights Partnership LLP



2 #OxonFreshwaterNetwork Instagram



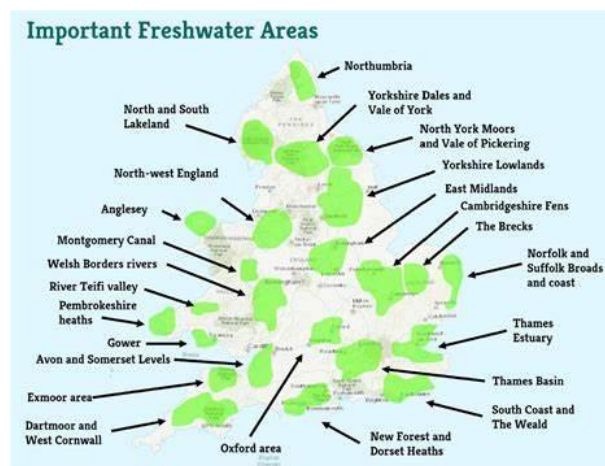
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Executive Summary

Funded by The Green Recovery Challenge Fund from October 2021 to March 2023, Building Oxfordshire's Freshwater Network restored, enhanced and created freshwater habitats in Oxfordshire as part of Freshwater Habitat's Trust vision to build stepping-stones for freshwater wildlife across the county and as a catalyst for change through the organisation's concept of Important Freshwater Areas.



3 Important Freshwater Landscapes

Oxfordshire includes the Oxford Important Freshwater Landscape, recognising the area's national importance for threatened wetland wildlife, and declining habitats such as floodplain meadows and alkaline fen. Building Oxfordshire's Freshwater Network allowed Freshwater Habitat's Trust to reverse these declines by working across the county with project partners to restore and create these rare environments.

Building Oxfordshire's Freshwater Network also included a novel community engagement element through GroWet. This ex-situ rare plant propagation project involved Oxfordshire residents in the growing of 25 species of endangered wetland plants, with the aim of returning them to high quality wetland habitats identified or created by Freshwater Habitat's Trust and its partners.

Habitat Creation & Restoration

Habitat creation was a key outcome for the project, working with project partners we achieved this at several locations.

Floodplain Wetland Mosaic



4 Artist's impression of Floodplain Wetland Mosaic

Creating a series of pools, ponds and scrapes of varied depth and size on floodplain sites to enhance opportunities for wetland wildlife. The project team created four new Floodplain Wetland Mosaics.

Challenges included gaining planning permission and cost of archaeology, but the team overcame these issues and delivered on the outcomes.

Species-rich floodplain grassland

Building Oxfordshire's Freshwater Network worked with partners, The Thames Valley Wildflower Meadow Restoration Project to restore 17ha of floodplain grassland on sites in Oxfordshire using green hay and plug plants.

Alkaline Fen

The habitat restoration element of the project involved working on six rare Alkaline Fen sites in Oxfordshire and reversing their succession towards wet woodland. We worked closely with volunteers and local contractors to achieve this and succeeded against our targets.

Challenges were mainly around the timescale of the project, gaining landowner and Natural England consent for works on SSSI sites and the large amount of work which was planned



for the year. Our contractors exceeded expectations and the project contributed towards reversing the decline of Alkaline Fen in Oxfordshire.

GroWet

An ex-situ plant propagation project working with The Oxford Botanic Garden and local botanists. The project worked with over 400 individual volunteers who fostered the plants for a period of 12 weeks in 2022. We provided volunteers with the resources they needed to grow the plants. Volunteers tracked their progress by filling in Plant Diaries, providing us with data on how the plants grew in a domestic setting and volunteers' experience of growing them. Overall the plants responded well and the growing of plants was uncomplicated for the majority of species. However, aquatic plants did not fare well and the majority died.

Alongside the plant propagation project, GroWet also included a series of successful community events, such as the Hinksey Heights Big Nature Day and a programme of arts events called Wetland Arts. These were delivered in partnership with Fusion Arts and other partners around Oxfordshire. Wetland Arts engaged over 800 people.



5 GroWet Wetland Arts

Freshwater Futures

A training program to help young people gain employment in the conservation sector. From February 2022 to March 2023, three trainees joined Freshwater Habitats Trust and successfully completed a series of:

- Technical training courses ran by external providers including botanical identification skills and survey techniques for protected species
- Practical training courses on habitat management techniques including chainsaw and brush-cutter qualifications
- Vocational experiences working with Freshwater Habitats trust staff on projects nationwide including assisting project managers in the Brecks and The Forest of Dean
- Vocational experience of project delivery and management through Building Oxfordshire's Freshwater Network including the process of creating floodplain wetland mosaics and practical fen management

All three trainees have successfully completed their traineeships and have gained employment with Freshwater Habitats Trust as Project Officers.



1 Our vision for Building Oxfordshire's Freshwater Network

The Building Oxfordshire's Freshwater Network Project ran from October 2021 to the end of March 2023 and highlighted Oxfordshire's extraordinary but declining freshwater heritage. It built on the exceptional fens, meadows, ponds and floodplains, and engaged people in habitat recovery.

Oxfordshire is recognised as a critical area for freshwater wildlife. Small habitats, particularly fens, ponds and floodplain wetlands, make up a disproportionate contribution to the county's freshwater and wetland biodiversity. Together, these small habitats support an exceptional 86% of the county's threatened wildlife species in a tiny footprint. Oxfordshire's remaining Alkaline Fen, for example, cover an estimated 4.5ha.

Building Oxfordshire's Freshwater Network marked the beginning of Freshwater Habitats Trust's aim to create a national network of thriving freshwater habitats across England and Wales. Building out from these key sites we have delivered the project through 3 main strands.

Building the Freshwater Network: A strategic programme embedded in Oxfordshire's Nature Recovery Network that restored key habitats including threatened SSSI Alkaline Fens and MG4 grasslands, built floodplain recovery zones by creating Floodplain Wetland Mosaics and networks of Priority Ponds, and reversed the decline of threatened species. 57% of Oxfordshire Alkaline Fens are in an unfavourable condition and MG4 grassland occupies less than 0.5% of the county's floodplains and 92% of ponds do not reach a priority status. Building Oxfordshire's freshwater Network aimed to reverse this decline by creating new habitats, creating steppingstones for species to move between

sites and restore Alkaline Fens to their former glory.

GroWet: Oxfordshire has experienced major losses of its iconic wetland plant species, for example, Grass of Parnassus, (*Parnassia palustris*) remaining at fewer than three isolated sites, and no other populations in the English Midlands. Engaging community groups and members of the public in growing some of Oxfordshire's rare wetland plants at home and in public spaces brings to the forefront the decline in wetland plant species and allows people to be directly involved in growing these plants and translocating them back to the suitable habitats. GroWet also offers people the opportunity to engage with wetlands in different ways through creative arts, poetry and specialist talks and walks.

Freshwater Futures: Training young people to become freshwater specialists fitted for knowledge-based conservation jobs is a priority for the sector, in order to reverse the decline in freshwater habitats.

Freshwater Futures addresses the need for more skilled people entering the conservation workforce and allows three young people the opportunity to do this through support, training and mentorship whilst also gaining valuable vocational experience by being heavily involved in project delivery.

2 Project management and communications

2.1 Building Oxfordshire's Freshwater Network Project Team

The Building Oxfordshire's Freshwater Network project couldn't have happened without building a team of passionate people who were willing to learn, share skills and knowledge, work hard and adapt quickly.

Whether it's putting on some waders in search of water violet, attending a community arts event, creating an interactive GroWet map, designing a leaflet or working with contractors to create a floodplain wetland mosaic, the team pulled together and delivered a unique, complex project in the space of a year.

Meet the team...

David Morris,
Project Director
and Senior Plant
Ecologist



Lizzie Every,
Community
Engagement
Officer



**Ellie
MacDonald,**
Freshwater
Futures Trainee



Paola Perez,
Freshwater
Futures
Trainee



Evie Granat,
Freshwater
Futures
Trainee



Andy Gunn,
Project
Manager





2.3 Project communication and dissemination

Project comms (internal)

Internal project communications were set up at the beginning of the project and involved a regular team meeting (every Monday morning) which gave staff an opportunity to share their work programme for the week ahead and gave an opportunity to resolve any issues and plan work together as a team.

We also regularly used Microsoft Teams, Planner and WhatsApp to communicate with each other throughout the project.

Staff developed their own style of communication and tailored their project planning / management techniques to fit with their roles and work schedules.

Project comms (external)

Communications with volunteers was delivered through quarterly newsletters and individual communications with Lizzie, our Community Engagement Officer. We also held several volunteer webinars for GroWet to help volunteers create a community around their volunteering experience and ask questions regarding their plants.

We had a weekly social media schedule, which allowed us to stay relevant and linked posts to wider campaigns such as International Women's Day and World Water Day. Overall we saw an increase of engagements with Freshwater Habitats Trust of **11.2% on Facebook** and **218.9% on Instagram**.

Using platforms like Canva we were able to produce high quality, professional posts which increased engagement with the project.

We also utilised skills within our team and our trainees produced high quality social media posts as well as printed materials. The GroWet Leaflet, Wetland Arts Leaflet and GroWet Plant Diaries are excellent and could not have been created without the skills that existed within the team.

We worked closely with our partners and our Communications Manager to produce timely press releases when project elements began and when they had been completed which has allowed us to gain notable coverage in local press including radio interviews and television interviews for our work at Farmoor and Manor Farm, Chearsley.

Project partnerships comms

Project communications with external partners were managed through regular catch-up meetings. For example, we held weekly catch ups with Oxford Botanic Garden, River Thame Conservation Trust and National Trust to ensure communication was kept up-to-date and that the key deliverables were moving at the pace that was needed with a short-term project.

End of project dissemination

This evaluation report will be available to project partners, and we will use it to develop the next phase of the Oxfordshire-Buckinghamshire Freshwater network.

We have arranged several tours of the Building Oxfordshire's Freshwater Network sites with project partners, including a site visit with senior National Trust Staff to the Coleshill Estate and a visit with the Upper Thames Farmer Cluster to demonstrate what is possible to local farmers and landowners.

Learning from Building Oxfordshire's Freshwater Network will be incorporated in our new Strategic Plan and vision and will be an example of how freshwater landscape scale projects can be delivered to create a thriving network of habitats for freshwater wildlife.



3 Evaluation strategy and legacy planning

Building Oxfordshire's Freshwater Network has been an important project for Freshwater Habitats Trust: we've developed new ways of working, we've created new habitats, restored historic habitats, engaged with new audiences and delivered a sustainable legacy for freshwater biodiversity in Oxfordshire, for our volunteers and for our project staff.

During the development phase of the project, Freshwater Habitats Trust developed an evaluation strategy and legacy plan for Building Oxfordshire's Freshwater Network with support from an independent evaluator Heritage Insider.

The aim of our evaluation was two-fold: it ensured we achieved our project objectives and targets, and it helped us improve the project outcomes for people, the freshwater environment and our organisation as the project progressed.

In our project's evaluation, we wanted to address **three key questions:**

- What were the environmental benefits of Building Oxfordshire's Freshwater Network?
- What were the benefits of Building Oxfordshire's Freshwater Network to people and communities?
- What were the outcomes for our organisation and the project legacy for wildlife, for our partners and for volunteers?

Evaluation of the environmental benefits was assessed for each of the project elements.

We compared each of the project elements against quantitative output targets and qualitative assessment against outcomes, e.g. number of people engaged, number of sites surveyed, completion of resources, and volunteer satisfaction. The outcomes are listed below. Quantitative targets are set out in the project's evaluation plan.

Building the Freshwater Network

- Area and location of habitat works
- Number of floodplain wetland mosaics created
- Number of Alkaline Fen sites restored and extent of work

GroWet

- The number and species of rare wetland plants in cultivation
- The number of rare plant introductions to freshwater sites

Freshwater Futures

- The number of projects with environmental outcomes that trainees were involved in working directly on the project
- The number of projects in the wider organisation in which the trainees were involved



7 Coleshill Mosaic by Andy Gunn

Evaluation of the benefits to people and communities.

Evaluation of the benefits to people was evaluated through the GroWet plant diaries and interviews with project volunteers and other participants, as well as immediate feedback forms for short term events such as training courses.

- The *number of people who participated* in each element of the project compared to targets,
- The level to which *people gained benefits from the project*, framed in terms of generic learning outcomes:
 - Knowledge and understanding,
 - Skills,
 - Attitudes and values,



- Enjoyment, inspiration, creativity,
- Activity, behaviour, progression.
- Well-being benefits of participants
- The project's reach, i.e. the geographical extent of the Building Oxfordshire's Freshwater Network Project.
- The breadth of our socio-economic engagement. Assessed through mapping and survey cards shown in figure 8 and 9.

Evaluation of the project outcomes for our organisation and the project legacy.

We needed to ensure that our own organisational structures were working well, and evaluated this in three ways:

- Internally *through staff reviews* providing targets for staff achievement and development, as well as providing feedback from staff on the adequacy of organisational management and staffing,
- Through *external review by the project evaluator*, and through questionnaire evaluations from volunteers and partners.
- Assessing our ability to achieve project legacy and benefits, for people and for our organisation.

Tell us what you thought! Freshwater Habitats Trust
GrowNet

1. Did you **enjoy** the event? Please tick on the scale.
Not at all (1) 2 3 4 A lot (5) [Smiley face]

2. What **one thing** would you **change or improve** about the event?
[Text box]

3. What **surprised** you at this event? For example, discovering a new place or something about nature
[Text box]

4. To what extent did this event help or inspire you to take notice of nature and what's around you? Please tick on the scale
Not at all (1) 2 3 4 A lot (5)

5. To what extent did this event help or inspire you to get active outdoors in nature? Please tick on the scale
Not at all (1) 2 3 4 A lot (5)

6. To what extent did this event help you to learn about freshwater habitats and their wildlife? Please tick on the scale
Not at all (1) 2 3 4 A lot (5)

8 Survey card created by Heritage Insider front

7. Have you been **inspired** to do anything as a result of attending this event? Please tick all that apply

- Attend more Freshwater Habitats Trust events
- Get out in nature
- Learn more about freshwater wildlife
- Explore more green and blue spaces near me
- Take action for wildlife at home or in my neighbourhood
- Go out and spot freshwater wildlife
- Submit my sightings of wildlife, e.g. PondNet spawn survey
- Volunteer for Freshwater Habitats Trust including GrowWet
- Other [Text box]

8. Have you attended a nature event before? Please tick one option

- Regularly, e.g. several times a year
- Have attended one but not in the last 12 months
- This is my first nature event
- Unsure

9. Finally, are you a member of a nature conservation organisation? Yes No

Oxfordshire's Freshwater Network was made possible by:

Green Recovery Challenge Fund

Department for Environment, Food & Rural Affairs | The National Lottery Heritage Fund | Environment Agency

About you Please tell us a bit about yourself to help Freshwater Habitats Trust, our partners and funders make sure that a wide range of people are able to enjoy butterflies. This will be kept anonymous and will only be used to help us better understand the people who take part in the Taking Flight project.

First part of postcode: [Text box] Do you consider yourself to have a disability? (Tick) Yes No Rather not say

Age range: Under 15 15-24 25-44 45-64 65+

Sex: Male Female I prefer to self-describe [Text box]

Ethnicity: Asian (Bangladeshi, Indian, Pakistani, other) Asian (Chinese) White Black (Caribbean, African, other) Mixed ethnic group

9 Survey card created by Heritage Insider back



4 Evaluation methodology

Building Oxfordshire's Freshwater Network involved three overlapping and complex elements including a novel approach to rare wetland plant cultivation through GroWet. We needed to continuously monitor our progress and be agile to ensure successful outcomes.

Freshwater Habitats Trust were keen to undertake the project evaluation ourselves so that we could be directly involved in seeing feedback and developing the project as we went along.

To ensure that we assessed each of the three key questions without bias, we used a combination of techniques and sought responses from different project audiences, bringing these together to get a consensus of opinions.

We also asked for Heritage Insider our external evaluator to undertake evaluation to answer specific questions, where we felt an independent approach was needed.



10 BOFN Radio Oxford Twitter post

We broke the evaluation down into stages of before (planning), during, and after (evaluation) to provide a comprehensive review of the results, as follows:

Evaluation during the planning phase of Building Oxfordshire's Freshwater Network

- Regular meetings with project partners to determine opportunities for habitat creation.
- Consultations with local people around habitat creation projects
- Consultations with local flora groups and experts to develop methodology for GroWet
- Consultation with local community leaders to determine the most appropriate audiences and locations to introduce GroWet

Evaluation during the delivery phase of Building Oxfordshire's Freshwater Network

- Quarterly reports as required by The National Lottery Heritage Fund
- Input against targets on the Green Recovery Challenge Fund Online Portal
- Bi-weekly meetings with Freshwater Futures Trainees to monitor learning outcomes and weekly project team meetings.
- Regular meetings with project partners
- Water quality and level monitoring on project sites
- GroWet dairies which allowed us to monitor volunteer growing methods and well-being benefits associated with the project.
- Analysis of social media and website data

Evaluation during the evaluation phase of Building Oxfordshire's Freshwater Network

- Independent evaluation by Heritage Insider
- Critical friend support and training for project Team.
- Exit interviews with three Freshwater Futures Trainees.
- Reflective practice Project Learning Review with project team.
- Telephone interviews with 10 project partners and stakeholders, to reflect on successes and problems



5 Summary of achievements

What we achieved...

A full list of how we met project targets is provided in section 8.1. This section summarizes some of the key achievements of Building Oxfordshire's Freshwater network.

The Building Oxfordshire's Freshwater Network Project **has made a real and significant difference to freshwater environments** through habitat creation, restoration and surveys.

- The largest Floodplain Wetland Mosaic ever created by Freshwater Habitats Trust at The National Trust's Coleshill estate.
- Six Alkaline Fens now in active management through scrub removal, re-wetting and species introductions.
- Plant and invertebrate monitoring have been completed for all the Alkaline Fen sites we are restoring.
- Recovery of species to sites from which they'd been lost, and creation of new high-quality habitats within the lifetime of the project.

The Building Oxfordshire's Freshwater Network Project has exceeded our expectations reaching out to a wide range of people and communities.

- The number of people engaged in growing rare plants at home through GroWet was approximately 600; our original target was 400.
- 94% of GroWet volunteers said that the project made them feel more connected to freshwater habitats and part of a bigger effort for nature
- Over 800 people attended 49 freshwater-themed events over the project timeline.

Building Oxfordshire's Freshwater Network has **allowed our organisation to grow and created a launchpad** for ongoing work and future projects.

- The use of Canva, Hootsuite and Eventbrite have been incorporated into the organisation, and social media outreach has been scaled up as a result of the project.
- We've secured funding to offer four of the project staff full time employment and
- Created a blueprint for a successful traineeship scheme through Freshwater Futures.

- High quality project signage and printed materials which have a lasting legacy and can be used for future projects.

Building Oxfordshire's Freshwater Network has **strengthened partnerships** with other organisations, community groups and volunteers and has enabled **Freshwater Habitats Trust to grow its influence in Oxfordshire.**

- On-going partnerships with key local stakeholders including Thames Water, The National Trust and The River Thames conservation Trust
- A new network of volunteers ready to take part in future projects and help reverse the decline in freshwater wildlife in Oxfordshire
- A new network of community groups willing to assist with GroWet, including community centres and libraries
- With stakeholders and partners, we have the most extensive experience of alkaline fen restoration in the county



11 Freshwater Habitats Trust staff with National Trust staff at Coleshill



Challenges

Building Oxfordshire's Freshwater network was a substantial project. Its short timescale created many challenges for delivery of the project's targets. The challenges we faced are summarised below.

Staff recruitment

The project needed to recruit five project staff in a short time, and once recruited, staff needed to be up to speed very quickly. This inevitably led to delays when getting the project started.

GroWet Logistics

With over 400 plants to deliver to individuals at their homes across the whole of Oxfordshire, we came across a series of logistical challenges which are listed here:

- We underestimated the time it took to put together plant plants and deliver the plants ourselves
- Using low carbon methods of delivery added time delays as the electric van we used had limited milage and took a considerable time to charge

Overcoming logistical challenges

- Using DPD and a cycle courier company (Pedal and Post) we managed to overcome the logistical challenges of delivering plants to individual volunteers
- We managed to organise delivery hubs for the collection phase of the project, we worked closely with Community Centres and Oxfordshire Libraries to co-ordinate this.

Understanding the planning system

Building Oxfordshire's Freshwater Network involved creating several large-scale Floodplain Wetland Mosaic habitats which needed to go through the local authority planning system. With a planning system not geared up to habitat creation projects this created the following challenges:

- Limited time to prepare the necessary planning documentation and reports
- Lengthy delays in communications from the local planning authorities
Regular amendments needed to designs as individual council departments commented on our planning applications

Overcoming challenges caused by planning

- Regular catch-up meetings with Paul White, National Trust Planning Officer who helped us through the process:

'The planning permission has been anything but straightforward. We have learned quite a few lessons about the complexities of projects like this, and the host of matters that need to be addressed prior to seeking approval from the planning authorities.'

Paul White, National Trust Planning Officer taken from stakeholder interviews, Appendix A

- We consulted directly with individual council departments in order to speed up the process
Contractor Procurement

The creation of floodplain wetland mosaics is not straightforward and finding a suitable contractor who has the relevant skills to deliver a sizeable wetland complex like the ones in this project created the following challenges:

- Limited pool of skilled and available local contractors
- Time needed by staff to supervise contractor work
- Increased cost of fuel, labour and materials
- Tight, seasonal timescales

Archaeology

Creating large floodplain wetland habitats came with the following challenges with regard to archaeology:

- Archaeological processes are not straightforward and require knowledge of specific processes and terminology e.g. Written Schemes of Investigation
- Archaeological contractors are very expensive, and costs are unpredictable

Overcoming archaeological challenges

- The team worked closely with a local Archaeological contractor and had regular meetings to plan the necessary reports
- Budgets were adjusted to allow for any unforeseen archaeology costs



6 Habitat creation and restoration

To build Oxfordshire's freshwater network, we needed to create new habitats and restore degraded habitats to add more steppingstones of high quality places into the landscape for freshwater wildlife to move between.

We Identified opportunity areas, working with landowners and stakeholders to create floodplain wetland mosaic, restore alkaline fen and restore/create new areas of species-rich floodplain grassland.

6.1 Species-rich floodplain grassland

This part of Building Oxfordshire's Freshwater Network was delivered in partnership with The Thames Valley Wildflower Meadow Restoration Project who are based at Long Mead Local Wildlife Site (LWS). Using Long Mead, an MG4 hay meadow as a donor site for seeds and a location to hold engaging events the group was able to achieve the following outcomes with funding from the GRCF programme:

Targets:

- Semi-natural floodplain grassland will be created on up to 50ha of grassland around core 10ha demonstration site
- invertebrate surveys of sites before and after restoration assemblage than baseline
- Invertebrate and botanical monitoring reports produced with recommendations for future management

Outcomes:

- 7ha of meadow restoration at Shrike and Buckthorn Meadows (Farmoor) using green hay from BBOWT Chimney Meadows
- Over 25 species of hay meadow plants have been gathered by hand from Long Mead LWS and propagated by care-farming groups and members of the community
- Twice monthly floodplain grassland workshops were run at Long Mead LWS with care-farming groups and members of the local community

- 6000 hand propagated plants were planted out on 10.35ha of floodplain meadow at Eynsham Carnival Community Meadow (0.5ha), Merton Great Meadow and Music Meadow (4ha), Christ Church Meadows (4.5ha), Hog Acre Community Meadow, Hinksey (0.5ha) Long Mead restoration area (0.5ha)
- 'Making meadows as part of creating biodiverse school sites' workshops held for 8 local schools
- 5 Wild Arts science workshops, combining arts and science held at Long Mead LWS
- Printed materials developed including laminated floodplain meadow plant description sheets and a floodplain meadows posterboard for use at events
- A series of plant descriptions and photographs were produced for the Long Mead LWS website
- A series of successful talks and presentations on floodplain meadow restoration at a number of events including The Thames Valley Environmental Records Centre Conference (March 2022), The Chartered Institute of Ecology and management Conference (July 2022) and The Oxfordshire Flora Group Conference (September 2022)
- Invertebrate and botanical monitoring of key sites at Farmoor completed before green hay spreading and future management recommendations shared with the landowner



12 Care-farming group at Long Mead by Catriona Bass

*A full report on of The Thames Valley Wildflower Meadow Restoration Project's GRCF programme is available in Appendix B



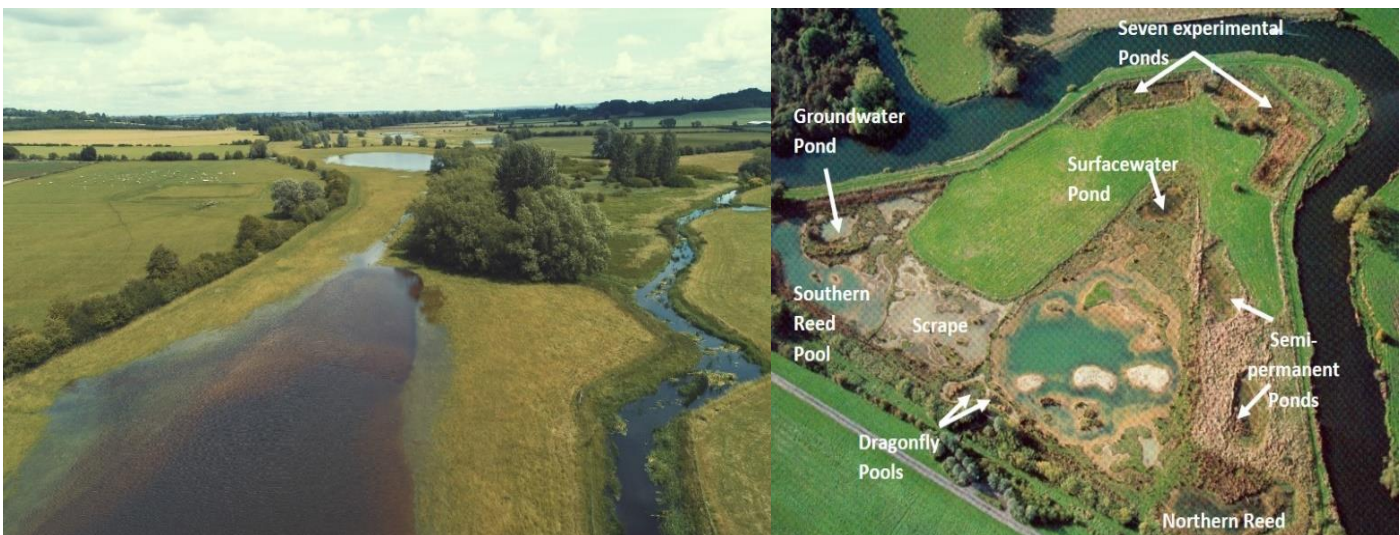
6.2 Floodplain Wetland Mosaic Creation

Floodplain wetland mosaic creation uses techniques first used at Pinkhill Meadows. Created by Freshwater Habitats Trust and Thames Water in the 1990's and now over 30 years old. Pinkhill provided a blueprint for floodplain wetland mosaic creation in the Building Oxfordshire's Freshwater Network project. Pinkhill is now incredibly biodiverse and supports populations of rare wetland plants and invertebrates.

This approach to restoring floodplains, aims to bring back a dynamic floodplain with wetland complexes full of pools, channels and scrapes to benefit a wide variety of wetland wildlife. Features include surface water fed ponds and groundwater fed ponds to maximise opportunities for different wetland species.

We used the following learning and best practice to inform designs:

- Wetland habitat creation followed best practice as described in the Million Ponds Project Toolkit¹ and real-world examples of Pinkhill Meadows and the newly created Waddesdon Wetland (Figure 14)
- Created pools that have long drawdown zones with gentle bank slopes to benefit aquatic plants and animals.
- Pools vary in size and depth so that they dry down at different rates to benefit a wide range of species, some more temporary, some more permanent.
- Protected species were considered during the design and waterbodies designed to be long and narrow to benefit local water vole populations.



13 Examples of floodplain wetland mosaic creation. 1) Waddesdon Wetland. 2) Pinkhill Meadows

¹ (<http://freshwaterhabitats.org.uk/projects/million-ponds/pond-creation-toolkit>)



Floodplain Wetland Mosaic Creation - Achievements

Project Sites

Farmoor Reservoir

Owned and managed by Thames Water, Farmoor reservoir is located just to the west of Oxford. Freshwater habitats has over 30 years' experience working in partnership with Thames Water at the site and created the Pinkhill Meadow complex here.

Long Mead Local Wildlife Site

*Species-rich floodplain grassland restoration site

Owned and managed by The Thames Valley Wildflower Meadow Project. An ancient MG4 hay meadow to the west of Oxford. Floodplain wetland mosaic was not created on this site and the summary of outcomes is available in section 6.1 of this report.

Manor Farm, Chearsley

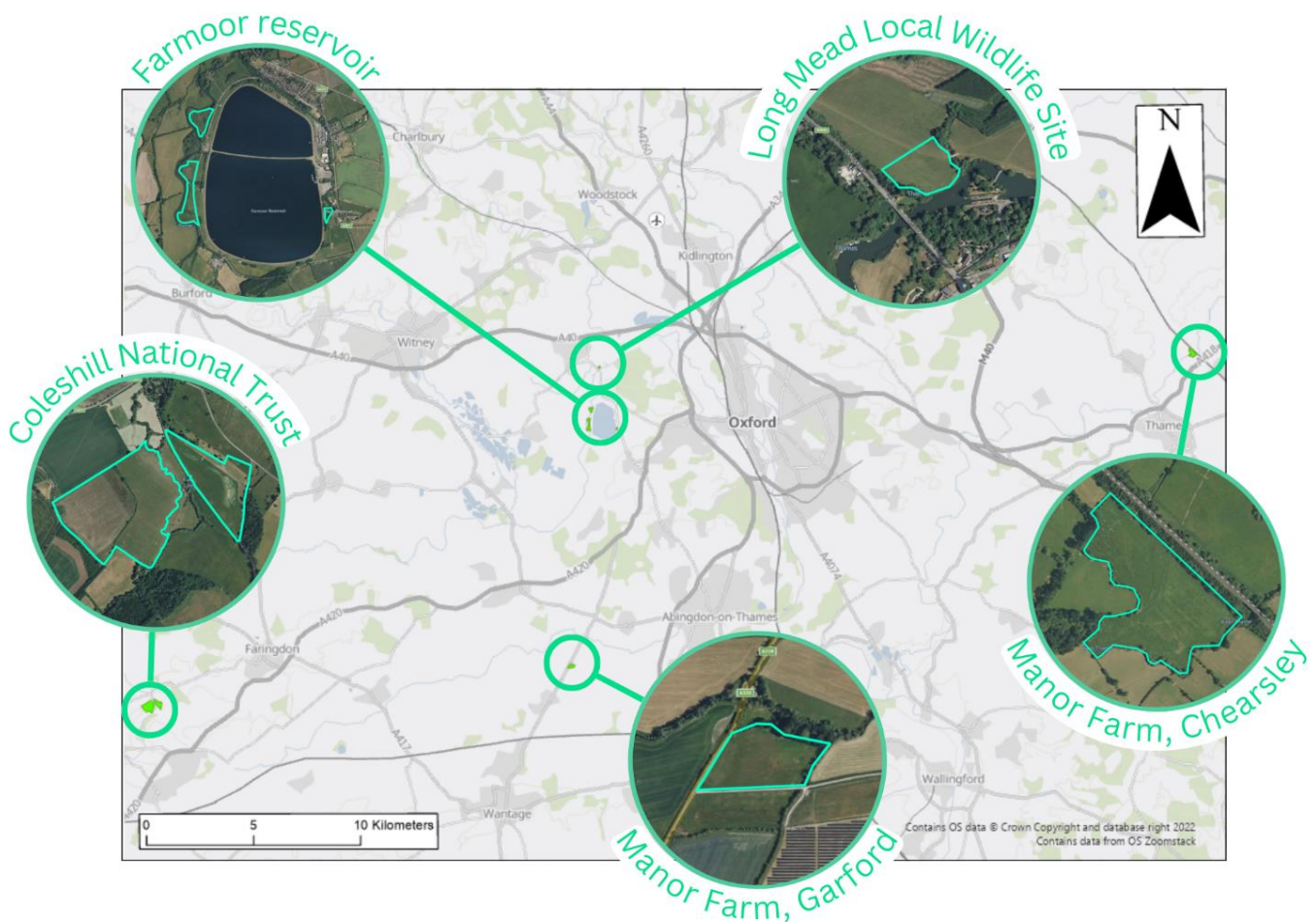
Manor Farm is a privately owned organic farm in the Thame Catchment. This part of the project was delivered in partnership with The River Thame Conservation Trust.

Manor Farm, Garford

Privately owned farmland located near to Grove, an area of land alongside the Chidrey Brook. This was identified through engagement as part of the Ock Catchment Partnership, which Freshwater Habitats Trust hosts.

Coleshill Estate

Owned and managed by The National Trust and located close to Farringdon, the Coleshill Estate is an extensive parkland with floodplain meadows along the river Cole. The work undertaken at Coleshill is the result of a long-term working partnership between The National Trust and Freshwater Habitats Trust.





6.3 Floodplain Wetland Mosaic targets table

The following table outlines the key achievements against targets through Building Oxfordshire's Freshwater Network's floodplain wetland mosaic creation on project floodplain sites.

Project Site	Targets	Key Achievements
Farmoor Reservoir Project delivered in partnership with Thames Water around the reservoir and floodplain of the River Thames.	<ul style="list-style-type: none">● 6 new ponds created with clean water sources● Areas of wetland, wet grassland and willow scrub● Public access integrated into design, providing:<ul style="list-style-type: none">○ High quality and engaging green/blue space within 250m of existing accessible areas○ Access for wheelchair users and other people visiting Farmoor reservoir.○ Enhanced understanding of local residents, Farmoor visitors through public engagement events	<ul style="list-style-type: none">● Eight new clean groundwater fed ponds created● Reed removal and reprofiling of six ponds at Shrike Meadow● Two new accessible ponds created near to Farmoor car park● Scrub removal on Buckthorn Meadow to improve grassland habitat for Grasshopper Warbler● Three guided walks for members of the public



15 Contractors working on Buckthorn Meadow

"The project adds to what we have here already. The site is becoming a flagship site for wetland creation and management. It's a big feather in our cap. This site will continue to highlight the importance of wetland habitats."
Hanna Jenkins, Thames Water Pinkhill Warden, Appendix A



Project Site

**Manor Farm,
Chearsley**

Delivered in partnership with The River Thame Conservation Trust and The Thame Catchment Partnership which is jointly hosted by Freshwater Habitats Trust and RTCT.

Targets

- Mosaic of 18 ponds and scrapes to establish Floodplain Wetland Mosaic
- Created pond and other wetland habitat will rapidly develop rich wildlife communities, adding biodiversity and resilience to landscape.

Key Achievements

- 15 new ponds and scrapes created.
- New backwater on the River Thame created (funded by The Environment Agency)
- Monitoring program in place for water levels, water quality and species
- Local contractor completed the work

'The project has set up a new arc of freshwater sites across the landscape and kickstarted new projects that will deliver landscape scale recovery of plants and species that have been struggling.' Hilary Phillips, Project Manager, The River Thame Conservation Trust, Appendix A



16 Floodplain wetland mosaic created at Manor Farm

Manor Farm, Garford

Project managed by Hannah Worker, Senior Project Officer at Freshwater Habitats Trust and through The Ock Catchment Partnership. Match funded by Vale of White Horse District Council through a Section 106 agreement.

- Mosaic of 7 ponds and scrapes to establish Floodplain Wetland Mosaic
- Created pond and other wetland habitat will rapidly develop rich wildlife communities, adding biodiversity and resilience to landscape
- Work for contractors will support the local economy

- Seven ponds and scrapes created
- Monitoring program in place for water levels, water quality and species
- Local contractor completed the work
- Used as demonstration site for Ock Catchment Farmer Cluster



17 Floodplain wetland mosaic created at Manor Farm, Garford



Project Site	Targets	Key Achievements
<p>Coleshill Estate</p> <p>Project delivered in partnership with The National Trust</p>	<ul style="list-style-type: none">● 13 new ponds will be created with clean water sources and two pre-existing ponds managed to reduce scrub cover and increase conservation value● Created pond and other wetland habitat will rapidly develop rich wildlife communities, adding biodiversity and resilience to landscape; ponds develop into priority pond habitat● Local residents and visitors to the Buscot & Coleshill estate will have an enhanced experience on walks and visits through contact with water● Work for contractors will support the local economy	<ul style="list-style-type: none">● 15 new ponds created as part of larger Floodplain Wetland Mosaic● Monitoring program in place for water levels, water quality and species● Local contractor completed the work



18 Floodplain wetland mosaic created at Coleshill

“We are talking to farm owners and tenants about future land mgmt. and what can be done better for wildlife on the estate. The project has huge potential to demonstrate and validate changes.”

Richard Watson, Countryside Manager, The National Trust, Appendix A



6.4 Alkaline Fen Restoration

Oxfordshire is home to some of the last remaining internationally important alkaline fens in England with 4.5ha out of a total of 19ha in England.

The majority of alkaline fen sites in Oxfordshire are unmanaged and have lost a significant amount of their previous biodiversity through succession to reedbed and wet woodland.



19 Bog Pimpernel (*Anagallis tenella*) by Tony Gillie

Alkaline fen sites in Oxfordshire are little known and often isolated from each other. Building Oxfordshire's Freshwater Network allowed us to not only restore areas of fen but also bring a new cohort of enthusiastic people to the 'fen party' so they can help protect and enjoy these special sites and all of their fascinating wildlife.

Freshwater Habitats Trust has worked for several years to restore alkaline fen in Oxfordshire and runs the Oxfordshire's Fens Project which aims to give practical advice to landowners and fund restoration work. In 2019 we worked with landowners included in this project on a Water Environment Grant funded project which helped to kick-start the work included in Building Oxfordshire's Freshwater Network.

This aspect of the project has cross-over with our GroWet project as many of the GroWet plants have been sourced from Oxfordshire alkaline fen sites. A special thanks goes to The Friends of Lye Valley who have become a donor site for many of the species.

Many of the species present at Lye Valley are now thriving at our most developed restoration site, Hinksey Heights Fen. Much of this work has been co-ordinated by local fen enthusiast Dr. Judy Webb.



20 Dr. Judy Webb at Lye Valley

The fen restoration work builds on the knowledge and experience of Freshwater Habitat's Trust and other local experts and delivers tangible outcomes for Oxfordshire's fen biodiversity from other successful fen work. We used the following principles to ensure the restoration work was a success:

- Botanical surveys and water quality testing before work began
- Introduction of Marsh lousewort (*Pedicularis palustris*) to site after initial cutting completed
- Key areas of peat and springs identified to maximise potential of successful restoration
- Introduction of historic fen plant species in consultation with Natural England, local experts and landowners



21 Grass-of-Parnassus (*Parnassia palustris*) by David Morris



Alkaline Fen Restoration - Achievements

Project Sites

Middle Barton Fen SSSI

11.58ha area of scrub and alkaline fen in Steeple Barton, West Oxfordshire, near Chipping Norton. Privately owned.

Weston Fen SSSI

13ha site with grassland, wet woodland, scrub and alkaline fen in Weston-on-the-Green, North Oxfordshire, near Kidlington. Privately owned.

Pea Pits Copse (Coleshill Fen)

4.5ha site with wetland woodland, scrub and alkaline fen on The National Trust, Coleshill Estate near Farringdon. Owned and managed by The National Trust.

Barrow Farm Fen SSSI

6.6ha site with wet woodland and alkaline fen. Near Abingdon in South Oxfordshire. Privately owned.

Hinksey Heights Fen LWS

A 24ha site with wet woodland, ponds and alkaline fen located to the west of Oxford in South Hinksey. Privately owned and managed in partnership with Hinksey Heights Partnership and the Hinksey Nature Trail Volunteers.

Spartum Fen SSSI

5ha site of wet woodland, ponds and alkaline fen located in Great Haseley near Thame. Privately owned.



22 Alkaline Fen restoration sites



Project Site

Targets

Key Achievements

Middle Barton Fen SSSI

- Ditch-blocking to increase water levels, encouraging the creation of peat and fen habitats
- Biological monitoring reports produced with recommendations for this year's management
- Nettles and Cleaver removed from 0.6 ha of degraded fen, providing an opportunity for the former fen habitats to regenerate.
-

- Ditch blocking using cut vegetation has raised the water table on site
- Monitoring of flora and invertebrate species carried out throughout the summer months and results will be available on-line in form of Oxfordshire Fens Assessment
- Nettles, cleaver and sedge cut from main fen area to allow smaller fen species to flourish



23 Middle Barton Fen by David Morris

Weston Fen SSSI

- Tall rank vegetation removed from 0.6 ha of degraded fen, providing an opportunity for the former fen habitats to regenerate.
- Scrub and trees removed to prevent shading and raise water table of the fen
- Biological monitoring reports produced with recommendations for this year's management

- Areas of nettle targeted through cutting and vigour reduced allowing smaller fen species to flourish
- Small trees and scrub removed from the site
- Monitoring of flora and invertebrate species carried out throughout the summer months and results will be available on-line in form of Oxfordshire Fens Assessment



24 Weston Fen by David Morris



Project Site

Targets

Key Achievements

Coleshill Fen

- Two Volunteer taster days to help establish an on-going group who can maintain the site
 - Common Reed removed from 0.6 ha of degraded fen, providing an opportunity for the former fen habitats to regenerate.
 - Trees and scrub removed from 0.6ha of degraded and overshadowed fen, providing an opportunity for the former rich fen habitats to regenerate
 - Ditch-blocking to increase water levels, encouraging the creation of peat and fen habitats
 - Biological monitoring reports produced with recommendations for this year's management
- 2 volunteer taster days organised with 10 people attending
 - Common reed, trees and scrub removed from 0.6ha of site
 - Ditch blocking with cut vegetation on 25m of ditch network which has allowed peat and fen re-wetting
 - Monitoring of flora and invertebrate species carried out throughout the summer months and results will be available on-line in form of Oxfordshire Fens Assessment
 - Marsh lousewort (*Pedicularis palustris*) seed introduced to restoration areas



25 Coleshill Fen by Tim Bearder



Project Site

Targets

Key Achievements

Barrow Farm Fen SSSI

- Common reed removed from 0.6ha of degraded fen, providing an opportunity for the former rich fen habitats to regenerate
 - Cut arisings used to increase water levels, encouraging the creation of peat and fen habitats
 - Biological monitoring reports produced with recommendations for this year's management
- Common reed removed from 0.6ha of site to allow smaller fen vegetation to flourish
 - Cut material used in 'habitat bars' around fen areas to keep peat wet and raise water table
 - Monitoring of flora and invertebrate species carried out throughout the summer months and results will be available on-line in form of Oxfordshire Fens Assessment



26 Barrow Farm Fen by David Morris



Project Site

Targets

Key Achievements

Hinksey Heights Fen

- "Approximately 30 volunteers will have volunteered time and gained new skills and greater understanding and enjoyment of the natural world.
- Ditch-blocking to increase water levels, encouraging the creation of peat and fen habitats
- Biological monitoring reports produced with recommendations for this year's management

- 2 successful volunteer taster days with 15 attendees.
- 12 volunteer work parties and 2 scythe training courses for 16 volunteers
- Ditch blocking to raise the water table on 10m of main ditch channel
- Monitoring of flora and invertebrate species carried out throughout the summer months and results will be available on-line in form of Oxfordshire Fens Assessment



27 Hinksey Heights Fen by Tim Bearder

Spartun Fen SSSI

- Dipwells installed and monitored by volunteers
- Dominant sedge and tall herb vegetation removed from 0.6ha of degraded fen, providing an opportunity for the former rich fen habitats to regenerate
- Biological monitoring reports produced with recommendations for this year's management
- Hydrogeological / WQ survey reports produced to inform volunteers and professionals

- Dipwells have been installed on-site to monitor the water table and have been checked bi-weekly by Freshwater Future's Trainees.
- Rank vegetation cut and stacked by contractor to allow smaller fen species to flourish
- Monitoring of flora and invertebrate species carried out throughout the summer months and results will be available on-line in form of Oxfordshire Fens Assessment



28 Spartun Fen by David Morris



7 GroWet

GroWet is the first project of its kind and raised awareness of the decline in freshwater plant species in Oxfordshire through an innovative propagation programme involving local people and experts.

Working closely with Oxford Botanic Garden and local experts, Freshwater Habitats Trust have been involved in rare plant propagation in Oxfordshire for a number of years. This work has mainly been focussed on key species like Greater Water-parsnip (*Sium latifolium*) and has involved small scale propagation from locally sourced seeds around the Oxford area.

Building Oxfordshire's Freshwater Network has allowed Freshwater Habitats Trust and Oxford Botanic Garden to significantly upscale the cultivation of rare wetland plants and involved over 25 species ready to be introduced to high quality wetland habitats in the future.

Oxfordshire has suffered major losses of its iconic wetland plant species with some species including Fen violet (*Viola stagnina*) holding on at only one native location. By bringing these species into cultivation their populations have been protected and they can be introduced to new clean water sites as they are unable to spread themselves.



29 Jim Penny (OBG) and Keith Cohen (Oxfordshire Flora Group) collecting True Fox-sedge (*Carex vulpina*) at BBOWT Meadow Farm Nature Reserve by David Morris

Plant Collections

To propagate rare wetland plant species, we needed to collect plant materials. This meant drawing on local knowledge and expertise from The Oxfordshire Flora Group and Flora Guardians. This took careful co-ordination from our Senior Plant Ecologist David Morris and Technical Manager, Penny Williams.

As many of the species are in protected areas (SSSIs or SACs) it was also important to engage with Natural England and gain landowner consent to remove plant material.

The process of collecting plant materials and seeds was time consuming and due to the time constraints of the project we only had a limited window when this could be achieved.

Data Management

Plants were given a code associated with their species and the collection location. This information was stored in a database so that we could record the movements of the plants.

Plant Propagation

Once collections had been completed materials were transported back to OBG where Jim Penny began to sort through them and experiment with different growing techniques and prepare plants ready to be sent to volunteers.

"Not only has the partnership given us a chance to engage with the public more widely, but our staff have been able to improve their personal development and I'm seeing some near transformation in that respect. It has enhanced our skill base, levels of enthusiasm and general behaviour. Some of our staff have flourished. That makes me very proud."

Mark Brent, Curator of Oxford Botanic Garden, Appendix A

Volunteer Recruitment

Once we had plants in propagation, we needed to recruit volunteers to take part in the project. We produced a series of high quality promotional materials which we distributed to community groups, farm shops, cafes and libraries across Oxfordshire. We also created an online version of the leaflet which



we shared on social media. All communications included a link to our online recruitment form which allowed us to manage volunteer information in our database. We attended local community events in different regions of the county and set up our own recruitment events in partnership with community centres and libraries.

Recruitment was successful and we found that people connected with the project quickly and wanted to help reverse the decline of wetland plant species.



30 GroWet Leaflet

Plant Packs

The project team created plant packs with all of the materials needed by volunteers to look after their plants, this included:

- Growing instructions
- Plant pots
- Compost
- Merchandise including pen, tote bag and stickers.
- Plant diary



31 GroWet plant pack

Distribution

We used an interactive map to keep track of our distribution of plants to volunteers. This was carried out in phases and by regions. We used an electric van alongside our own vehicles to distribute plants. We also used a cycle courier service (Pedal and Post) to distribute plants around Oxford City and DPD to deliver a proportion of the plants around the rest of the county.



Andy Gunn @G... · 29/06/2022

Our electric #GroWet van full of some of the rarest #Wetland plants in #oxfordshire ready to be delivered to volunteers in #Abingdon today. If you haven't signed up yet- there is still time: bit.ly/3DGsW8x @PondRiverStream @HeritageFundUK #GRFC



3 14 37

32 GroWet Electric van by Andy Gunn

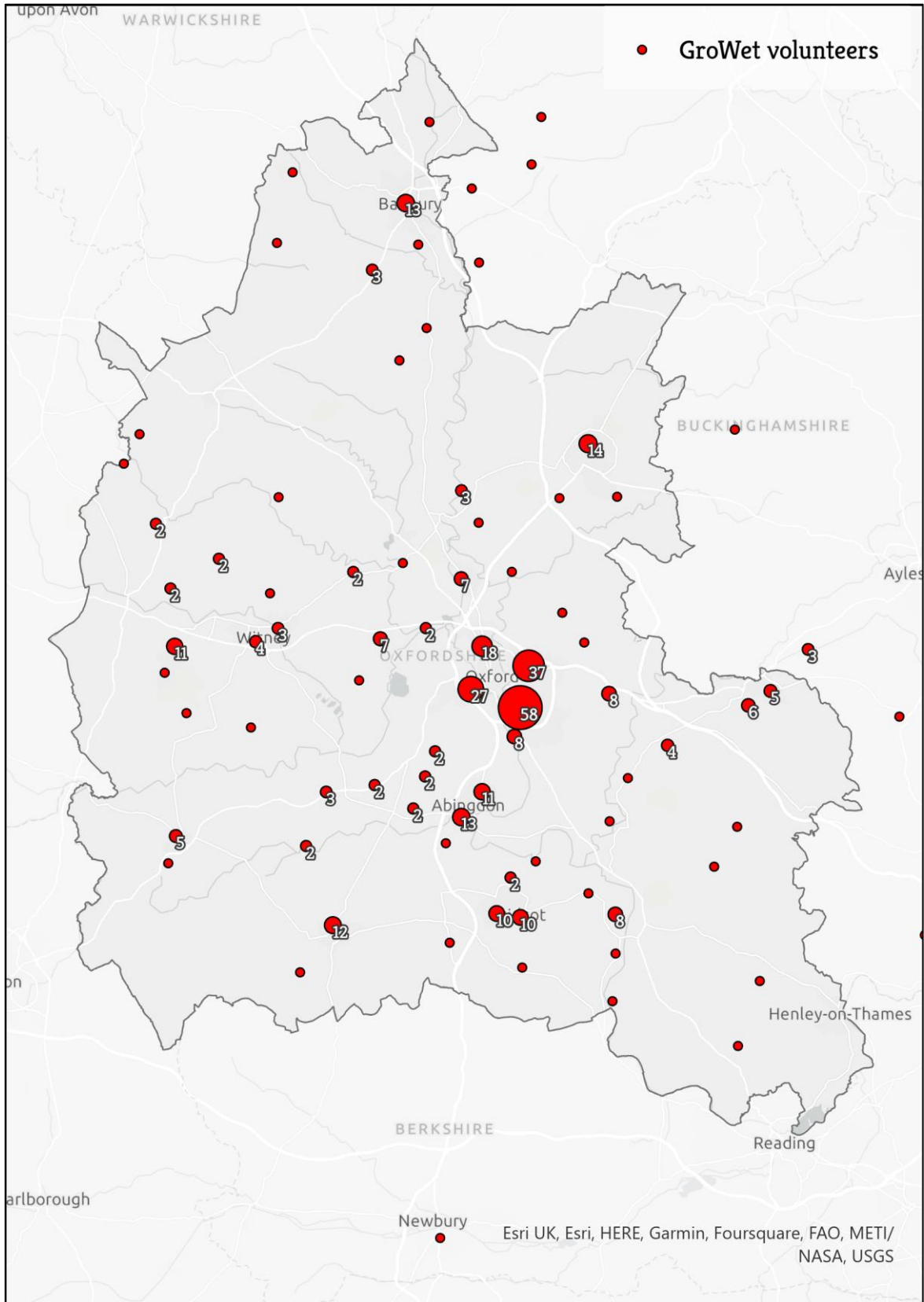
Collections

We worked closely with community centres and libraries to co-ordinate plant collections and offered hubs in different key locations around Oxfordshire so that people could drop their plants off, and we would not need to make individual trips. We also used a DPD return service so that people could post their plants back to us. We managed to recover 60% of the plants we had distributed. Some of the plants had died including 95% of the Frogbit (*Hydrocharis morsus-ranae*) we distributed, and we had lost contact with some of the volunteers or did not have enough information from them to contact them.

Distribution of GroWet Volunteers in Oxfordshire

Figure 33 on page 28 shows the distribution of volunteers who took part in GroWet. The most engaged areas appeared to be urban areas, i.e., Oxford, Bicester, Banbury, Abingdon, Wantage and Didcot. This correlates with where we had the most engagement with local community groups and held the most events. We also recruited in rural areas and villages/smaller towns. Overall, we had good coverage of the county.

















We also did well in areas where we have longstanding partnerships, for example in the Thames area where we work with The River Thames Conservation Trust and West Oxford/Eynsham where we have working partnerships at Hinksey Heights and Farmoor.



33 Distribution of GroWet Volunteers



7.1 Achievements against targets

		Target	Achieved	Not met	Achieved	Exceeded
Project materials	Leaflet	1000	2500			
	Recruitment form	500	500			
	Online sessions	3	4			
Plant packs	Plant packs	400	600			
	Seed packs	800	0			
Schools	School sessions	8	6			
	Seed packs	800	0			
Community Groups	Community Centres	5	8			
	Libraires	N/A	5			
	Wildlife Groups	5	5			
Volunteers	Individual	400	469			
	Part of a Community Group	100	100			
Publicity	Radio	3	6			
	Television	2	4			
	Social Media Posts	30	50			
	Newspaper/website	5	10			



7.2 Evaluation of GroWet

In the first year of GroWet, we had to adapt quickly in order to make it a success and have learnt valuable lessons on how to deliver it. Our key achievements were:

- Distributed over 500 plant packs to individuals and community groups
- Engaged an estimated 800 people across 49 wetland themed events
- Worked with new groups including libraires, community centres and care homes
- Ran our first Big Nature Day event at Hinksey Heights Nature Trail
- Delivered six GroWet themed school sessions in schools around Oxfordshire
- Planted 50 Greater Water-parsnip (*Sium latifolium*) plants at Otmoor Nature Reserve in partnership with the RSPB
- Set up new Instagram and Facebook pages for GroWet which led to engagement increase for Freshwater Habitats Trust pages of 11.2% on Facebook and 218.9% increase on Instagram

'The people and volunteers that came out to do the planting definitely found it exciting. They had exclusive access to the reserve which they really enjoyed. They also had the opportunity to go out with expert botanists on the day. I think people really appreciated that, they appreciated the opportunity to learn more about the plant and its life cycle.'

David Wilding, Reserve Warden, RSPB Otmoor, Appendix A



35 Greater water-parsnip (*Sium latifolium*) planting at RSPB Otmoor



34 Volunteer with Marsh arrowgrass (*Triglochin palustris*)



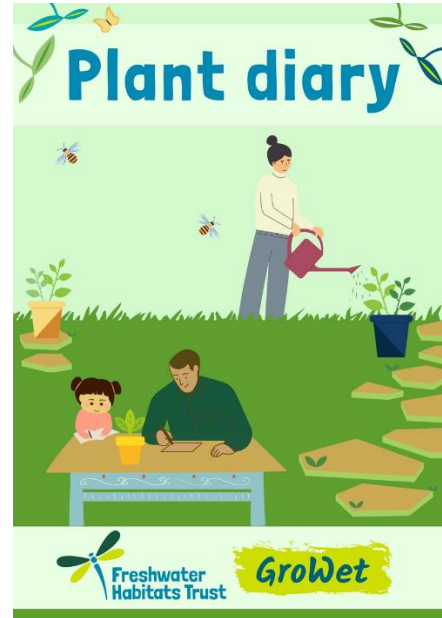
36 Recruitment event at Oxfordshire County Library by Lizzie Every



7.3 Outcomes for Volunteers

Building Oxfordshire’s Freshwater Network’s Community Engagement Officer, Lizzie Every reflects on the benefits of GroWet for volunteers:

‘It is well understood that interacting with nature and socialising with like-minded people can improve our wellbeing both physically and mentally, and with eco-anxiety becoming more prevalent, professionals across the environmental and medical sectors are encouraging people to become part of something greater, on top of their individual efforts to help the environment, to further relieve their anxiety.’



38 GroWet Plant Diary



37 Diagram showing evidence that indicates ways in which the GroWet volunteering programme supported wellbeing, using the Five ways to Wellbeing framework

As part of GroWet, we wanted to explore whether looking after a rare wetland plant at home and becoming a part of the GroWet community had any impact our volunteers’ wellbeing and, if so, whether it was positive.

We gave each of our 469 GroWet volunteers the option to complete a plant diary, with set questions each week, to track their plant’s progress and their frame of mind throughout the growing period. A project questionnaire was also included at the end of the plant diary to help us to evaluate the project’s overall effect.

In the diary, we asked our volunteers to rate the following statements on a scale of, ‘Strongly Agree’ to ‘Strongly Disagree’.

- *GroWet has changed the way I look at freshwater habitats*
- *Being part of GroWet has helped me take notice of nature*
- *Through GroWet, I have felt part of a bigger effort for nature*
- *GroWet has helped me to make a real difference to local nature*

We also asked, in a free text question ‘Do you feel like you have personally benefitted from GroWet in any way?’.

Plant diary- week one

Species name: _____ Date planted/received: _____ Today's date: _____

How tall is your plant?

If your plant has leaves, how many are there?

Has your plant flowered?

What have you done to look after your plant this week?

Water type used

Where is your plant being kept? What is the temperature and is your plant in sunlight?

Did you notice anything unusual on your plant? e.g. fungus or insects

What surprised you about your plant this week? Have you noticed anything interesting about it?

How does caring for your plant make you feel?

Extra note space.

39 GroWet Plant Diary weekly survey



A total of 143 volunteers wrote in their diaries and completed the plant diary questionnaire. After collecting the diaries, we digitised our volunteers' feedback and analysed the results. The results showed overwhelmingly positive feedback from GroWet volunteers with:

- 80% agreeing that GroWet has changed the way they look at freshwater habitats, and in a positive way.
- 94% agreeing that through GroWet, they have felt part of a bigger effort for nature,
- 80% agreeing that being part of GroWet has helped them take notice of nature,
- 61% agreeing that GroWet has helped them to make a real difference to local nature
- 73% agreeing that they have personally benefited from taking part in GroWet.

To gain a better understanding of our volunteers' responses to *Do you feel like you have personally benefitted from GroWet in any way?*, we compiled a list of quotes from volunteers' answers, both positive and critical.ⁱ (A selection of volunteer quotes is available in Appendix C.)

We found that this question gave our volunteers freedom to let us know how the project truly impacted them.

Out of 64 comments;

- 16% were broadly critical including one volunteer who suggested that wellbeing should not be a focus of project, rather, the focus should be on wildlife alone
- 84% were positive and volunteers felt as though they were doing something important, which made them feel happy or gave them a sense of pride. Others mentioned how the project made them feel more aware of the nature surrounding them, which invited them to feel more connected with the environment. In conclusion, these findings strongly suggest the following:
- taking care of a rare wetland plant at home can improve your mental wellbeing, helping people to

become more aware of nature, and allowing them to feel as though they are doing their part to help safeguard the future of our natural habitats.

- Feedback response numbers were lower than expected and a larger data set would provide more accurate feedback
- Volunteers began to lose motivation towards filling in their diaries half-way through the project

Recommendations

- An online system may well help to keep this motivation, as we will be able to email the surveys over to our volunteers regularly which will, additionally, enable more opportunities for communication.
- To focus more on whether being a part of the GroWet community helped to improve volunteers' wellbeing we should include more questions exploring how much our volunteers became involved in our GroWet events and what they took from them, as well as encouraging feedback from event attendees on the day.
- To learn more about how GroWet affected volunteers' wellbeing, asking volunteers to submit separate questionnaires about how they feel before, during and after the growing period might also improve our overall evaluation.

"GroWet has given me a diversion from personal difficulties. I've become more interested in wetlands. It's a worthwhile project - You feel as if you are helping nature - and you can learn along the way too!"

GroWet Volunteer



7.4 Outreach and events

GroWet offered Freshwater Habitats Trust a unique opportunity to work with different audiences, communities and local interest groups. This helped us to raise awareness of Oxfordshire’s wetlands and engage new groups of people in the fight to protect them.

Wetland Arts

Working with Fusion Arts, a community arts organisation based in Oxford, we developed a series of 12 wetland themed art events which included:

- Wetland arts launch event open to the public at Boundary Brook Nature Reserve in Oxford attended by approximately 100 people
- Two drop-in community print making events, at Templars Square shopping centre in Cowley, Oxford and at Cornerstone Arts Centre in Didcot, each attended by approximately 30 people
- Three bookable wetland poetry events in partnership with SciPo (Scientific Poetry), at Oxford Botanic Garden, the Oxford University Department of Plant Sciences and Coleshill Estate, each attended by approximately 15 people
- Two bookable wetland arts events held at Christchurch Meadow and Wytham Woods, Oxford, each attended by approximately 15 people.
- Wetland Arts exhibition ‘Window gallery’ for 2 weeks in September 2022 in Friars Entry, Oxford City Centre
- Two dance workshops at Hinksey Heights Nature reserve with Café Reason dance group attended by approximately 20 people
- A Celebration of Wetlands Arts event in temporary space, Gloucester Green, Oxford attended by approximately 100 people and GroWet volunteers

Wetland Arts gave us the opportunity to mix science and art and bring a deeper understanding of wetlands to artists and the public. The events also helped us to recruit volunteers to GroWet and secure a legacy of people who can communicate about freshwater conservation from a different point of view.

- We produced a Wetland Arts summary leaflet as an output of GroWet which is available in Appendix D.



40 Drawing Water Germander at Wetland Arts event by Tim Bearder

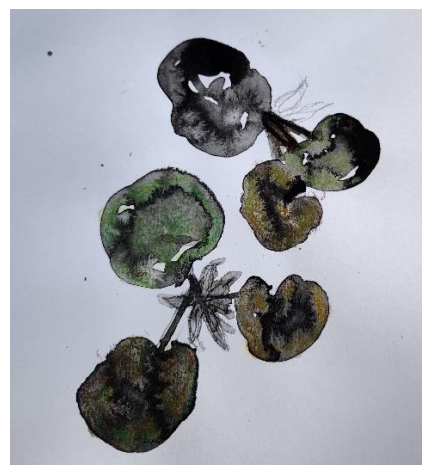


41 Fusion Arts, Cafe Reason, SciPo logos

Wetland Arts engaged with over 500 people across 12 events

‘All three [poetry] workshops were vivid experiences where participants engaged with experts in their working surroundings and were encouraged to create poetry informed by on-site contemplation of wetland plants and their habitats. Each workshop was different, with little overlap of attendees.’

Elsa Hammond and Sarah Watkinson, TORCH SciPo network



42 Artwork from Wetland Arts event



43 Helen Edwards with artwork

Recruitment events

Working with project partners we held targeted recruitment events at Oxfordshire Central Library, The South Oxford Community Centre and Florence Park Community Centre. These events gave us the opportunity to speak directly to people about GroWet, distribute leaflets and sign people up and included a selection of demonstration plants so people could see some of the species they may end up growing at home.



44 GroWet at FloFest

'I think it's really vital that we are doing events like this, and by we, I mean organisations that are really concerned about nature, wildlife and biodiversity and by we, as Fusion Arts. I think it's really important that organisations work together to create partnerships to be able to find ways to convey these messages about the state of our planet, of our earth, of our habitats locally and nationally to people in a way that makes it accessible and allows people to engage and have a voice.'

Helen Edwards Eco therapist, Artist and Community Engagement Advisor for Building Oxfordshire's Freshwater Network

The recruitment events were a success with an average of **20 sign ups** at each of the events and on top of the recruitment we achieved through our Wetland Arts events and our leaflet distribution we managed to disseminate the message quickly and raise awareness of the project to a wide audience.

Alongside planned recruitment events we also took the GroWet message with us to events organised by other organisations, for example we took part in FloFest (The Florence Park, Oxford Festival) where we managed to recruit over **30 people** and to an event organised by BBOWT (the local Wildlife Trust) in Bicester where we managed to recruit **15 people**. By linking up with partner organisations for events we avoided the need to do independent advertising and were able to speak to people who may have been attending events for other reasons, as well as a captive audience.



45 Lizzie at 'Wild Bicester' Event



School Sessions

We delivered six school sessions, five with Key Stages 3 and 4 at primary schools and one session with a home school group. Sessions comprised set lessons around freshwater habitats, exploring issues with water quality and looking at aquatic animal identification, including pond dipping sessions.

Prior to visiting schools, teachers were asked to identify a waterbody at their school or in a nearby park or nature reserve. We tested these for nutrient enrichment using simple test kits for nitrates and phosphates.

Our target was to engage with eight schools and although we had eight sessions available on Eventbrite we only managed to secure six bookings.

Engaging with schools had its challenges as the team was stretched to capacity organising other aspects of the project. We also had problems with schools returning our communications. In the end, we used Eventbrite to allow teachers to book onto events meaning we only had to advertise them.

Timings for schools was also a problem as we had to fit sessions into term time and with other project commitments this was difficult.



47 Home school session at Hinksey Heights

Free School Sessions!
Ponds & Wildlife - KS2 & 3

Our GroWet Team would love to visit your school in Oxfordshire!

Click on the Eventbrite link in our bio to book your session

46 School sessions social media advert

We visited schools in February 2023 and had the following feedback responses from five of the six schools (including the home school group):

- 100% rated the school session content very good or excellent
- 80% rated the quality/clarity of the message good or excellent
- 100% rated the overall session experience good or excellent
- 100% were inspired to do more for local freshwater habitats
- 100% were interested in booking more sessions in the future



7.5 Reaching new audiences

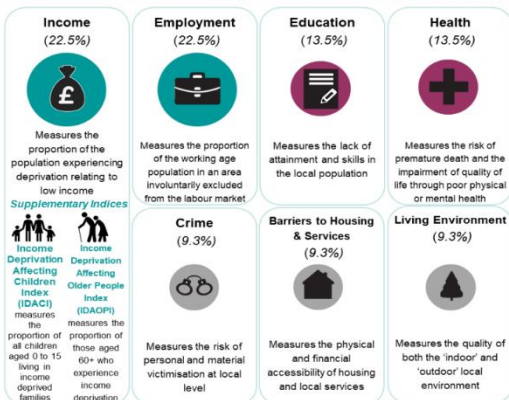
Oxfordshire Community Foundation

We worked closely with the Oxfordshire Community Foundation (OCF) who generated a report for us (Appendix E) on which areas of Oxfordshire we should target GroWet recruitment based on open data from the mapping and reporting tool Local Insight. The report highlights the areas of Oxfordshire which have the highest level of deprivation based on the following.

- Index of Multiple Deprivation (IMD)
- Barriers to Houses and Services
- Mood and anxiety disorders indicators
- Comparative illness and Disability Ratio
- Access to green/blue space

Data has been taken from up-to-date information from the Census, Department of Work and Pensions, deprivation and other sources.

There are 7 domains of deprivation, which combine to create the Index of Multiple Deprivation (IMD2019):



48 The 7 domains of deprivation

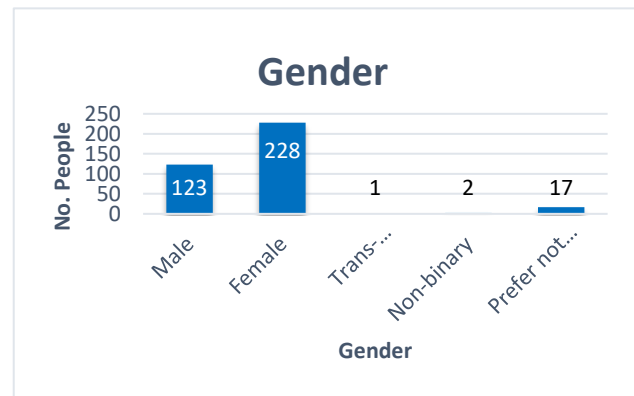
Oxfordshire is on average a wealthy county, however when looking at data based on the index of Multiple Deprivation some wards within urban areas feature in the nationally most deprived 20% including **Abingdon, Banbury and Oxford**. By looking at the next 20% most deprived, **Berinsfield, Bicester, Chipping Norton, Didcot and Kidlington** are also included.

Figure 54, On page 38, shows the distribution of GroWet Volunteers against The Index of Multiple Deprivation. When analysing the data, we can see that although we succeeded in recruiting from a wide geographical area and got good coverage of the county as a whole, we tended to recruit from more affluent wards where people are traditionally more

engaged with conservation projects. This may be because people in more affluent areas tend to have more time to engage with conservation projects, better access to green space and a peer group who shares an interest.

- 469 volunteers who signed up to take part in GroWet,
- 371 provided us with details regarding their age, sex, disability and ethnic background.

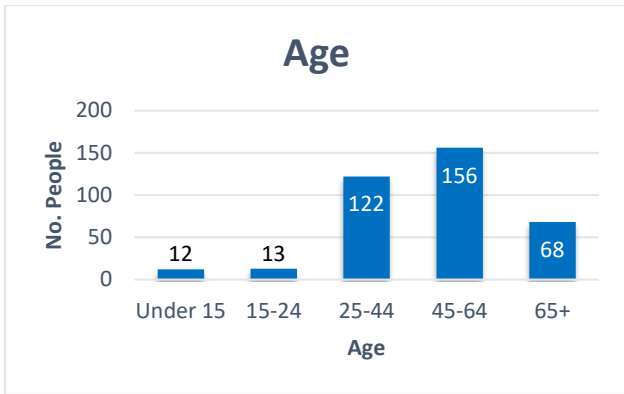
From this information we gathered the following results:



49 Graph to show gender of GroWet volunteers

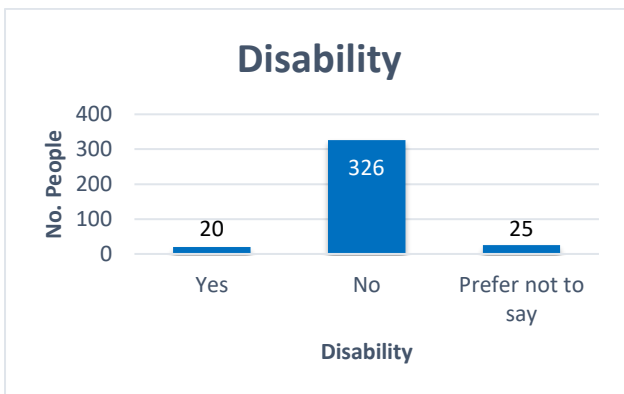
- 61% of participants were female
- 33% were male
- 6% were transgender, non-binary or preferred not to say

This suggests a positive trend towards female participation which is positive as from anecdotal evidence there is often a trend towards male participation in conservation volunteering. This could be because we had a team of 6 of which 4 are female and acted as positive advocates for the project. It may also be due to the flexibility around the project which allowed women with other commitments the opportunity to take part.



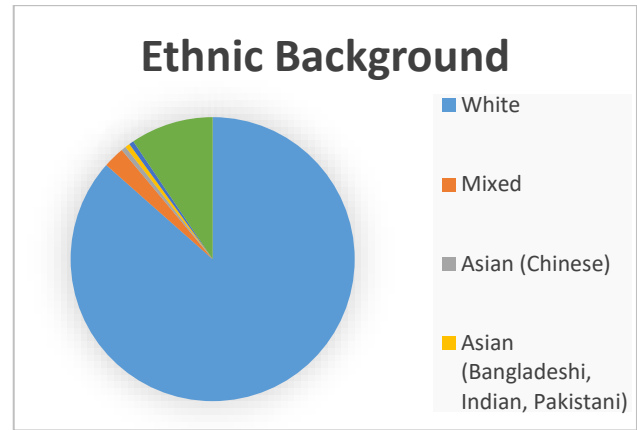
50 Graph to show age of GroWet volunteers

- 3% of participants were under 15
- 3% of participants were between 15-24
- 32% of participants were between the age of 25-44
- 42% of participants were between the age of 45-64
- 18% of participants were aged 65 or over.
- 75% of participants were within the working age category which suggests that GroWet offered sufficient flexibility to allow people who were working to take part.



51 Graph to show disability of GroWet volunteers

- 5% of participants said they had a disability which suggests that GroWet was inclusive enough to allow people with disabilities to take part



52 Graph to show ethnic background of GroWet volunteers

- 86% of participants were White,
- 2% were Mixed Race
- 0.5% were Asian (Chinese)
- 0.5% were Asian (Bangladeshi, Indian, Pakistani),
- 2% were other and 9% preferred not to say

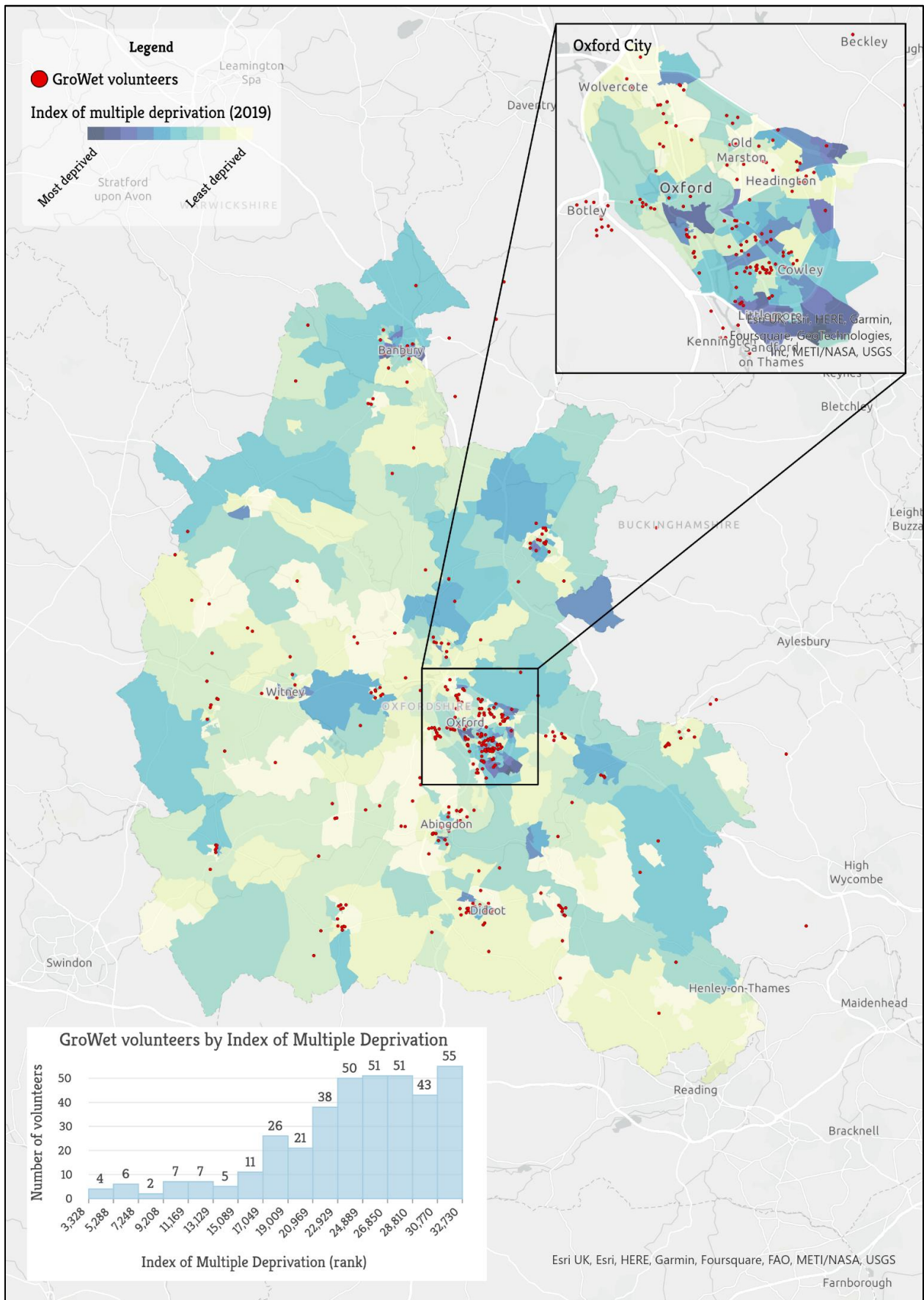
Although we did have some participants from different communities the results suggest that work is needed to engage people from different ethnicities in the project in the future.

Case Study: Home Instead, Banbury

Care professionals from Home Instead North Oxfordshire helped 20 clients to grow and look after rare and endangered wetland plants over the summer. This was part of the organisation's 'be active' initiative, which encourages clients to be active mentally, physically and socially. Home Instead North Oxfordshire worked alongside community group Age Friendly Banbury to get older people in the community involved in GroWet.



53 Home Instead North Oxfordshire client Elaine with her 'GroWet' plant, one of Oxfordshire's most endangered water plants, Creeping Marshwort. (*Helosciadium repens*)



54 GroWet volunteers across Index of Multiple Deprivation



8 Freshwater Futures

Freshwater Futures offered three young trainees looking to get into the conservation sector an opportunity to take part in a yearlong training programme with Freshwater Habitats Trust.

All three trainees have gained on-going employment with Freshwater Habitats Trust in Project Officer roles where they can use the skills learnt and develop their vocational experience further.

A comprehensive training schedule was produced for our Freshwater Future Trainees at the start of the project. The training programme aimed to provide a focussed itinerary of the skills and experiences needed to be successful in the freshwater conservation sector. These were divided into core training which included essential skills like botanical identification and vocational skills which included shadowing Freshwater Habitats Trust staff on other projects. This broad approach allowed the trainees to explore different skills and experiences but also to learn the specialist skills needed in the freshwater sector.

This was updated when the trainees started in post and the schedule was tailored to complement their individual training needs.

Training courses attended by the trainees were evaluated using feedback forms at the end of each training sessions.

When the trainees started in post in February 2022, they were introduced to the tools they needed to self-evaluate their progress throughout the year.

Each of the trainees has produced a diary which summarises their work and training during their traineeship. The diary also forms part of the legacy of this project as it will help them refine CVs and with job applications. The diaries helped to monitor and evaluate learning from vocational experiences as well as structured training courses.

Once the three trainees started in post an initial workshop was set up by the Project Manager to take the trainees through the learning framework and discuss any individual training needs and amendments.

The Trainees were introduced to The Continuing Professional Development (CPD) record and an Individual Development Plan (IPD) where they could keep track of their progress and record key learning outcomes. The CPD and IPD forms used can be found in Appendix F.



55 Evie, Paola and Ellie at The TVERC Recorders Conference

The training programme has allowed trainees to feel confident in all aspects of conservation work and has provided them with the practical tools needed for the conservation sector.

Evaluation of external courses

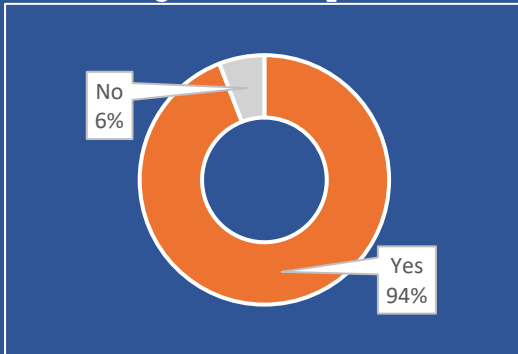
Freshwater Futures trainees attended 10 external courses, ranging from botanical identification, learning to use a brush cutter and media training. At the end of each session trainees were asked to complete a feedback form to determine if the course had been a success.

This also gave our trainees the opportunity to meet external trainers and partner organisations. The courses were organised through local and national networks of facilitators. Some of the courses were bespoke and organised specifically for our trainees, e.g. the Trust for Oxfordshire's Environment (TOE) delivered a bespoke course on grant applications. This has proved invaluable as one of the trainees (Paola) has since gone on to apply for funds from TOE and found the training session gave her a good foundation to work from.

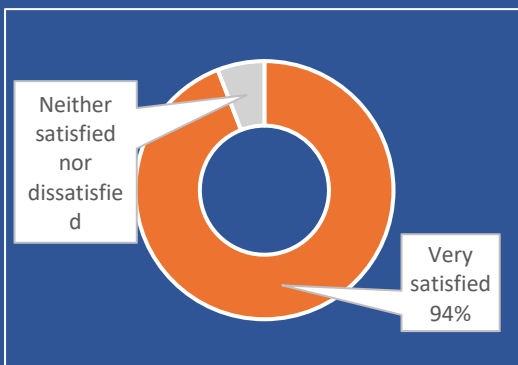


Overall feedback from external courses was very positive and all three trainees felt that they benefited from taking part. Results from some of the key questions are given below.

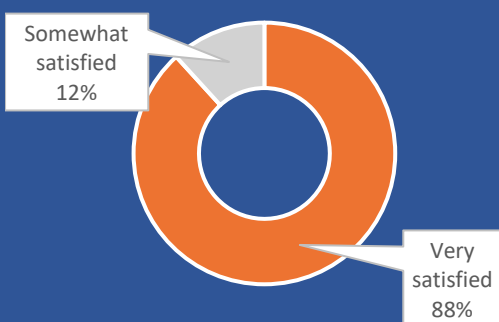
1. Were the expectations you had about the training / workshop met?



2. How satisfied are you with the way the facilitator / trainer delivered the course?



3. How satisfied are you that the training course was relevant to your development?



By evaluating at the end of each training session, we have been able to assess the usefulness of each course and identify factors which made for more beneficial and enjoyable courses:

- Pre-recorded training courses lack the personal touch and create a barrier to learning as participants cannot engage directly with the facilitator
- Practical/interactive sessions are most effective as they provide real-life examples and context for participants
- Enthusiastic and engaging facilitators got the best results
- Mixed courses with people from different backgrounds and organisations were beneficial as participants could share knowledge and practical examples

Understanding what makes a good course will be useful in planning future staff training.



56 Scythe training by Nicole Clough

Evaluation of vocational experiences

Part of what made Freshwater Futures a success was day-to-day learning and experiences of the work place.

All three trainees were fully involved in delivering the Building Oxfordshire's Freshwater Network Project and were vital to the project's success from start to finish. Some of the highlights included:

- Developing the concepts and ideas for GroWet and designing the printed materials, plant packs and diaries
- Monitoring water quality and retention at our Floodplain Wetland Mosaic sites
- Procuring and supervising contractors at our project delivery sites
- Working with the Oxford Botanic Garden to plan and propagate plants for GroWet volunteers



- Creating engaging social media content for project channels
- Helping to plan, co-ordinate and deliver our GroWet events across the year

Trainees also contributed to the wider work of Freshwater Habitats Trust, working across different teams to support national projects and gain experience in working with different projects and methods, in the following locations:

- Water quality monitoring in the Brecks, helping Freshwater Habitats Trust to increase the number of samples in the area and attending the Brecks Volunteer Conference
- Great Crested Newt surveys assisting Freshwater Habitats Trust's partner organisation The Newt Conservation Partnership to record data in Oxfordshire and Buckinghamshire
- eDNA sampling in the Forest of Dean, helping The Newt Conservation Partnership get a better idea of Great Crested Newt populations
- Botanical surveys and water quality monitoring in Cheshire assisting The Ponderful Project.
- All three trainees spent a week in the River Irfon supporting the team there with botanical monitoring and landowner engagement.



58 Ellie and Paola with Great Crested Newt



59 Evie and Ellie eDNA samples



57 Ellie, Paola and Evie at The Brecks Volunteer Conference

'Evie and Ellie were amazing colleagues during our time away in Cheshire collecting field data for our European Ponderful project. It was hard, muddy work - often lugging the boat across fields, and there were lots of new techniques to pick up: measuring vegetation abundance, collecting Chlorophyll data, filtering water samples and taking depth measurements. Ellie and Evie were great fieldworkers: smart, constantly engaged, and supportive. They created a happy and effective team that made the best of challenging conditions.'

Penny Williams, Technical Manager



60 Evie on a boat for Ponderful

Team training

As well as external training and vocational experiences we also developed a culture of learning and development in our team, making the most of the skills we had within the team.

For example, Project Director and Senior Plant Ecologist David Morris organised two field trips to the New Forest to give the team an understanding of the habitats there, to learn about the diverse plant life and the work Freshwater Habitats Trust New Forest team is doing to protect these areas.

Not only was this good for team bonding but it provided an excellent grounding for the whole team on valley mire habitats and what makes the area so important for freshwater wildlife.

David also organised field trips to Otmoor for the team where he shared his knowledge of plants. This was very useful as many of the GroWet plants had originally come from the site so we were able to see them in their natural environment and gain a better understanding of what makes the site special.



61 Andy, Evie, Ellie and Paola in the New Forest



62 David, Ellie and Lizzie botanising at Otmoor by Hannah Worker

Alongside botanical training the team also took part in sessions on how to run volunteer work parties, leadership, presentation skills, project management and GIS training which were all delivered in-house by project staff.

Setting aside time to train the team in this way was invaluable to the success of the project as staff could learn the principles of different disciplines and then apply them to practical situations and receive on-going feedback and mentorship from more experienced staff.

Freshwater Futures Projects

Each trainee was given a budget and was asked to produce a small project which gave the experience of planning, developing and delivering a project for the organisation. All three trainees delivered successful projects which now form part of the legacy of Building Oxfordshire's Freshwater Network

'I wish we could do that training course again. It was such good fun. Definitely the most enjoyable course I've ever run.'

David Morris, Senior Plant Ecologist at Freshwater Habitats Trust commenting on New Forest Course

What did our Freshwater Futures Trainees think?

Heritage Insider, our independent evaluator, conducted exit interviews with all three of our trainees to evaluate how they felt the training program/experience had gone. Highlights from their interviews are given below.

*Trainees exit interviews are available in Appendix G



Ellie MacDonald

Before joining Freshwater Habitats Trust, Ellie completed her MSc in Conservation and Biodiversity where she carried out research into the carbon storage potential of seagrass ecosystems in Cornwall, in addition to furthering her knowledge of ecology and nature conservation. Alongside her studies, Ellie volunteered with the Cornwall Wildlife Trust and BBOWT, where she has assisted with a range of practical conservation and community engagement work. In her spare time, Ellie enjoys swimming, hiking, and painting.



What do you feel you personally gained from the traineeship?

Specifically, chainsaw skills and hand tools skills, the practical skills were new to me. The experience has helped me transition between education and a career, and how to merge the two. It's been a perfect steppingstone. I learned the knowledge and I have since learned the practical skills, and engagement skills on many levels, to build a strong foundation from which I can continue to progress.

What are you most proud of during your time with Freshwater Habitats Trust?

The floodplain and wetland creation has been good, engaging with the contractors and doing tenders has been quite good. Negotiating and site visits with contractors has been good. Now seeing the work complete is something I am very proud of. Seeing it progress from a design on paper to complete in practical terms is a big thing.

From your perspective, what do you think is the secret to offering a fulfilling placement?

The secret to offering a fulfilling placement is to create a good team environment. Our team get on really well. Communication is open, supportive and welcoming. We all fitted in together very well and quickly too. Our managers were very open and supportive from day one. We knew we could reach out if we had any questions, no question was too stupid. They have always been reachable and open. They made it so easy for us to fit in.



Paola Perez

I completed my masters degree in Biology and Conservation and then I was looking for a job. I joined the team because it looked like exactly what I was looking for. The sector is a competitive field with few entry level jobs, so it was perfect for what I was looking for and needed.



What do you feel you personally gained from the traineeship?

Now that the project is ending I feel I am ready to take a job as a Project Officer. The project has also opened many doors in the sector for me, all that in just a year. That is the biggest gain for me. The amount of training I have received, the people I have met, the overall good we have done to habitats and nature. I have the skills, knowledge and networks to stay in the sector which is fantastic.

What are you most proud of during your time with Freshwater Habitats Trust?

A realisation that I can actually do this job. As a first job, I didn't know if I would be able to meet the standards required and produce quality work. I also feel proud that I can help nature in some way. I have proved to myself that I can do this job, but also how it is possible to make my passion my job.

From your perspective, what do you think is the secret to offering a fulfilling placement?

The training aspect of the traineeship was really important. We agreed to a traineeship salary, and we expected training and in this case it has been really good. We have definitely profited from being in a traineeship. The team has been really important too. The team is supportive, they have helped us learn, do our jobs better and deliver what we needed to.

Freshwater Habitats Trust are a well-established organisation and having those long-standing resources in house to help us develop has been key; I can imagine with a smaller organisation we may have not got the same opportunities or exposure.



Evie Granat

Prior to this role, Evie completed a BSc in Geology in 2018. She has since volunteered for multiple organisations including practical conservation for the Suffolk Wildlife Trust and public facing/behind the scenes roles for various Oxford museums. She then went on to become an Environmental Monitoring Technician, working on sites across the midlands.



What do you feel you personally gained from the traineeship?

I have gained a lot of training that will help me secure conservation jobs in the future. I have gained softer skills, like working with volunteers and community groups. I have also learned how best to work cohesively in a close-knit scheme, how to work through issues, those sorts of skills.

What are you most proud of during your time with Freshwater Habitats Trust?

I'm most proud of what we have achieved together as a team. We have worked really well together, have created some really big habitats and worked on a big project engaging hundreds of volunteers. It was educating and inspiring to get so many people on board in such a short period of time.

From your perspective, what do you think is the secret to offering a fulfilling placement?

Good communication between managers and trainees is the key. We were lucky, Andy made time for us whenever we had questions or needed help. It is important to be trained properly and to be listened to. To have had a fulfilling project to get stuck into, that was a critical learning experience aid also. Hearing back from the volunteers is fulfilling too. Feedback of any type is really inspiring and useful. Having the opportunity to do the training however, is the most fulfilling part of it.



9 Overall Evaluation

Building Oxfordshire's Freshwater Network has been an important project for Freshwater Habitats Trust and has allowed the organisation to develop its key principles and experiment with new initiatives and processes.

There have been a number of firsts for the organisation including:

- engaging the general public in growing rare wetland plants through GroWet
- delivering large scale Floodplain Wetland Mosaic schemes on multiple sites in the space of one year.
- the first time Freshwater Habitats Trust has taken on trainees

Freshwater Futures in particular was a departure from Freshwater Habitats Trust's usual work, which is focused on delivering practical conservation work. This aspect of the project has highlighted the need to provide young people with the skills and opportunities to help reverse the decline in wetland wildlife and offers a tangible solution to the shortage of skilled individuals in the conservation sector. Given its success, it is hoped that Freshwater Futures will be the first of many times the organisation will offer a training programme.



63 The Building Oxfordshire's Freshwater Network project team on a plant hunt at Otmoor

With all of these new initiatives and with a brand-new team of staff, there has been a wealth of learning along the way. Not only has the team needed to learn about the organisation and the concepts involved in the

project, it has also had to learn how to work as a team, manage tight deadlines and work with what at times seemed like unattainable targets.

Despite the challenges of the project, we thought on our feet, adapted, and rose to the challenge. This evaluation has offered time to reflect on our achievements but also to learn from mistakes, refine our processes and make recommendations for future projects.

We must attribute the overall success of the project to the people who have been involved, both directly as staff and project partners but also the volunteers and community groups who showed such enthusiasm for GroWet and protecting our amazing freshwater heritage in Oxfordshire.

The Conclusions and Recommendations table in section 8.1 shows in more detail how the project team achieved the outcomes of Building Oxfordshire's Freshwater Network and makes suggestions and recommendations on how Freshwater Habitats Trust can incorporate learning into future project delivery and refine its processes as the organisation continues to grow.

Some of these conclusions are especially important to highlight:

- **Staff Training** – Freshwater Futures has shown us that by investing time and resources, and by sharing knowledge, we can equip staff with the tools the organisation needs to achieve its goals and objectives.
- **Community Involvement** – Don't underestimate the power of volunteers and community groups to make real changes for local wildlife and habitats.
- **Team work, skills and knowledge sharing**– Encourage staff to work as a team to achieve goals and foster an encouraging working environment where all opinions and input are valid. Share resources and refine processes across the organisation.



9.1 Conclusions and recommendations table

Targets	How we achieved targets	Recommendations	Actions
<p>Project set up</p> <ul style="list-style-type: none"> Project staff recruited, have all of the equipment they need to do their jobs and understand the project and the organisation 	<ul style="list-style-type: none"> All project staff recruited between October and December 2022 Equipment purchased at the start of the project including laptop computers, outdoor clothing etc. Project Manager and Community Engagement Officer in post January 2022; trainees in post February 2022 Project orientation and planning workshops held with project team 	<ul style="list-style-type: none"> Increase advertising for recruitment and use different methods for example LinkedIn for proactive recruitment to increase number of applications 	<ul style="list-style-type: none"> Look at current recruitment process and refine/improve with more proactive recruitment
<p>Training</p> <ul style="list-style-type: none"> Training programme agreed with staff and staff are equipped with the relevant experience and skills to secure jobs 	<ul style="list-style-type: none"> Detailed training programme developed before Freshwater Futures trainees started, with a range of experiences available to all trainees. Training and experience tailored so that trainees maximised the chance of being employed after they had completed their programme 	<ul style="list-style-type: none"> Plan more staff time into training programme, i.e. use more internal expertise to deliver training Plan traineeships into more projects or develop a model so that this can be repeated; based on current recruitment it is hard to find highly skilled people Provide more opportunities for young people to access the conservation sector 	<ul style="list-style-type: none"> Develop sustainable model for Freshwater Habitats Trust to continue Freshwater Futures programme
<p>Communications</p> <ul style="list-style-type: none"> 10% increase in people following Freshwater Habitats Trust on social media channels. 	<ul style="list-style-type: none"> We posted regular updates on social media platforms (Facebook, Instagram and Twitter) and developed new engaging content through videos and 	<ul style="list-style-type: none"> Plan communications early on in project and ensure the team is trained to deliver these using the necessary tools Don't underestimate the amount of time it takes to effectively engage with 	<ul style="list-style-type: none"> Budget training for staff in traditional and social in future projects Ensure on-going engagement initiatives with community



Targets	How we achieved targets	Recommendations	Actions
<ul style="list-style-type: none"> ● Weekly social media posts ● Regular coverage in local press/media ● Project stands at 5 community venues associated with project sites ● 5 Project Videos 	<p>the use of the design software Canva and using Hootsuite to schedule posts.</p> <ul style="list-style-type: none"> ● We equipped the team with training, so they felt confident taking part in media coverage this meant we were able to respond quickly if we had media requests. We also worked closely with our communications Manager to produce timely press releases at key milestones in the project. ● Our Community Engagement Officer worked quickly to establish partnerships with community venues which allowed us to have stands and recruit for GroWet in their venues ● We worked closely with a local filmmaker Tim Bearder who is producing a series of videos about the project which will be available online at a later date 	<p>community groups and ensure this is done at the early stages of a project of this size</p>	<p>groups and volunteers to maintain interest and keep people engaged with Freshwater Habitats Trust's work</p>
<p>Evaluation and Legacy</p> <ul style="list-style-type: none"> ● Buckinghamshire Important Freshwater Areas assessment ● Project continues to make a significant difference to freshwater nature conservation in Oxfordshire ● GroWet volunteers enjoy having plants and continue to gain benefits from 	<ul style="list-style-type: none"> ● Staff time dedicated to delivering the Buckinghamshire Important Freshwater Areas assessment, to be made available in April 2023 ● Enjoyment of GroWet participants evaluated through plant diaries 	<ul style="list-style-type: none"> ● Ensure the organisation has sufficient skills, time and resources to carry out IFA assessments ● Provide project staff with tools and knowledge to update the website ● Ensure staff in projects have the support and are given the time to plan evaluations 	<ul style="list-style-type: none"> ● Plan in staff time for large reports at the start of the project ● Update website and make less complicated (new website launch planned in April 2023)



Targets	How we achieved targets	Recommendations	Actions
<p>Participation in the Project</p> <ul style="list-style-type: none"> ● website is maintained ● Freshwater Habitats Trust permanently employ at least two of the trainees ● GroWet well-being report ● Lessons learnt identified from evaluation reports and findings disseminated to partners and included in final reporting ● Project meets its targets ● All participants made aware of opportunities to transition to other environmental and outdoor activities that benefit both them and the natural environment 	<ul style="list-style-type: none"> ● We engaged continuously with volunteers and sent regular newsletters and held events. ● Communication with volunteers continues into new NE Nbs Project ● Creating and restoring freshwater habitats in Oxfordshire has made a significant difference ● We planned website updates throughout the project and allowed staff time to create up to date blogs and content ● All three trainees have started or will start new contracts with Freshwater Habitats Trust once the project ends ● We continuously and proactively created new projects that gave the best opportunities to our trainees for full time employment ● We continuously evaluated the project and kept partners up to date on our outcomes – a full report will be available in April 2023 ● We used the project as an opportunity to promote the wider work of partner organisations and of Freshwater Habitats Trust and gave participants the opportunity to engage with these 		<ul style="list-style-type: none"> ● Provide training to project staff in Project Management and evaluation reporting



Targets	How we achieved targets	Recommendations	Actions
<p>Alkaline Fens</p> <ul style="list-style-type: none"> • Trees, scrub and reed removal from 5 sites and ditch blocking at 2 sites • Dipwells installed and monitored by volunteers • Biological monitoring reports produced with recommendations for this year's management • Hydrogeological / WQ survey reports produced to inform volunteers and professionals • Report and raw data made available on project web pages • Results of monitoring used in project comms • Approximately 30 volunteers will have volunteered time and gained new skills and greater understanding and enjoyment of the natural world. 	<ul style="list-style-type: none"> • We engaged with a local contractor early and planned the work on the fens • We carried out botanical surveys using planned resource from our project team and involved staff and trainees in the process • We commissioned invertebrate surveys with an independent contractor • We engaged with an external contractor (Milestone Environmental) to install dipwells at Spartum Fen and these were monitored by project staff • Water quality monitoring of fens carried out by project staff • Project staff given time to produce reports and interim data shared with project partners and participants • We created a series of volunteer training events for volunteers including scythe training, hedgelaying and coppicing and held four successful volunteer taster days at Coleshill and Hinksey to increase volunteer capacity 	<ul style="list-style-type: none"> • Avoid overreliance on one contractor, build in training opportunities when delivering projects to disseminate skills to a broader group of people • Bring more fen management skills in-house and equip staff to lead volunteers 	<ul style="list-style-type: none"> • Diversify contractor reliance by up-skilling staff/volunteers or engaging with new contractors • Diversify volunteer offer in the organisation and invest in volunteer training/management
<p>Habitat Creation</p> <ul style="list-style-type: none"> • New Floodplain Wetland Mosaics created at Coleshill, Manor Farm Garford, Manor Farm Chearsley and 	<ul style="list-style-type: none"> • Floodplain wetland mosaics were created at all listed sites and delivered by the project team working with partners and landowners. 	<ul style="list-style-type: none"> • Engage with planners and archaeologists early in the design process 	<ul style="list-style-type: none"> • Training to be organised for new staff • Best practice for floodplain wetland mosaic creation



Targets	How we achieved targets	Recommendations	Actions
<p>Farmoor, adding biodiversity and resilience to landscape</p> <ul style="list-style-type: none"> ● Work for contractors will support the local economy ● Increased public enjoyment of sites ● Semi-natural floodplain grassland will be created on up to 50ha of grassland around core 10ha demonstration sites ● Created grassland will support plant species and assemblages characteristic of MG4, and over time approach this grassland type ● Created grassland will support richer invertebrate assemblage than baseline ● Invertebrate and botanical monitoring reports produced with recommendations for future management ● Floodplain grassland creation sites will encourage understanding of value of floodplain sites 	<ul style="list-style-type: none"> ● The team sent out tender documents to potential contractors and then arranged site visits before receiving quotes for the work ● The project team organised guided walks at publicly accessible sites Farmoor and Coleshill with landowners and project partners. We also included project sites in our wetland arts programme ● We worked with TVWMRP who delivered the floodplain grassland element of the project and also co-ordinated invertebrate and botanical monitoring ● The TVWMRP organised a series of engaging events to raise awareness of floodplain meadows 	<ul style="list-style-type: none"> ● Offer early training on floodplain wetland mosaic creation to new staff ● Engage more with project partners who are delivering different elements of projects 	<p>incorporated into Freshwater Habitats Trust documentation</p> <ul style="list-style-type: none"> ● Guidelines on how and when to engage with planners and archaeologists created and training organised with the county archaeologists in Buckinghamshire
<p>GroWet</p> <p>Project has a clear end, results and outcomes</p>	<ul style="list-style-type: none"> ● Project materials were designed in-house by the project team ● The project team held several meetings to determine the key messages that volunteers needed to know – these 	<ul style="list-style-type: none"> ● Keep deliveries to individuals to a minimum as this takes up valuable resource 	<ul style="list-style-type: none"> ● Use distribution hubs and ask volunteers to collect their plants from their local hub ● Plan staff time to create a pre-GroWet survey



Targets	How we achieved targets	Recommendations	Actions
<ul style="list-style-type: none"> ● Project materials enable understanding and participation from volunteers c.400 people / families in the non-traditional audiences target groups sign up to join GroWet ● c.400 GroWet rare plant packs, with all materials needed for propagation are produced ready for distribution to target non-traditional conservation audiences ● c.800 GroWet seed packs and growing instructions produced for schools and community groups ● at least 800 participants from approx 8 schools (Key stage 2/3) and community groups receive rare plant seed packs to grow ● GroWet plants from participants in hard-to-reach groups are collected from doorsteps ● At least 3 Q&A sessions held online and online peer to peer GroWet community established via social media ● Plant translocation data available ● GroWet participants will contribute their time and gain knowledge and skills in rare plant propagation 	<ul style="list-style-type: none"> ● were then summarised in growing instructions and plant diaries created by trainees and GroWet instructional videos featuring some of our project staff and staff from Oxford Botanic Garden ● We held a series of GroWet webinars before volunteers received their plants which included troubleshooting and basic information about GroWet species ● Our Community Engagement Officer worked closely with local groups and communities to increase the awareness of GroWet and organised a series of recruitment events and leaflet drops in key areas ● Plant packs were designed and created, packed and delivered by the project team ● School sessions were planned and delivered by the project team ● Non-traditional audiences were identified with information provided by The Oxfordshire Community Foundation and this allowed to project team to target recruitment towards these audiences 	<ul style="list-style-type: none"> ● Carry out wellbeing survey at the start of volunteer journey so there is a baseline to work from ● Create more activities around the plants and which are targeted towards specific marginal groups ● Reduce the targets for schools engagement and work with more uniform groups 	<ul style="list-style-type: none"> ● Plan more staff time to engage with marginal groups by reducing working with individuals ● Plan in schools sessions early on a one year project and contact uniform groups to plan sessions



Targets	How we achieved targets	Recommendations	Actions
	<ul style="list-style-type: none">• Plants were collected from doorsteps by the project team• The project team designed and careated volunteer plant diaries and surveys which allowed us to gather feedback from participants		



10 Building Oxfordshire's Freshwater Network project legacy

Dr Jeremy Biggs Co-Founder and CEO of Freshwater Habitats Trust introduces the legacy of Building Oxfordshire's Freshwater Network



64 Dr Jeremy Biggs

Founded in 1988 as Pond Conservation, based in Oxford and working throughout the UK and with continental European colleagues, the organisation has developed a distinctive new approach to the protection of freshwater biodiversity based on scientific evidence, often collected by the organisation itself. That evidence has allowed us to identify and focus on the most important parts of the freshwater landscape, especially the smaller waters and wetlands that dominate the water environment but are largely overlooked in science, policy and practice.

Having practically tested over the last 25 years a range of new approaches to 'what works' for freshwater biodiversity, and to develop the concept of the Freshwater Network, the GRCF-funded "Building Oxfordshire's Freshwater Network" gave us a stable

platform to launch and start demonstrating this approach practically.

In our new Strategic Plan, the Freshwater Network is central unifying idea and is central to the roll out of our concept of Important Freshwater Landscapes. Working from our Oxfordshire heartlands has allowed us to test the concept of Important Freshwater Area's in a landscape we are familiar with and with trusted partner organisations.

As one of the originators of the original experiment to restore the River Cole at the National Trust Coleshill Estate in the 1990's, it has been exciting to see the new Floodplain Wetland Mosaic created alongside this in the floodplain. This has helped to underpin the working partnership with the National Trust at Coleshill, and we are already planning the next projects and schemes with the National Trust which will develop from this work.

Personally, I've been tremendously impressed by the way the team has delivered the novel concepts in the project brilliantly executing the projects against tight timescales and attracting substantial outside attention. Our first large scale ex-situ rare wetland plant project, GroWet, has been both a fascinating experiment, and proof that people in the communities of Oxfordshire are inspired to help the plight of freshwater wildlife and more to the point., do something proactive to help.

Like other parts of the Freshwater Network programme, the GRCF funded work has clearly shown the great practical potential for further roll out across the country.

Attending events that the team delivered through GroWet I found them inspiring and engaging - bringing a new slant on things with which I'm very familiar for example the Wetland Plants Poetry session which allowed participants (including me) to find a new way of connecting with freshwater wildlife really did help us all express a more reflective side of the work we do.



Bringing in new young entrants to conservation in the Freshwater Future's has been a huge success for us – working out absolutely as well as we could have expected. We now have three new talented, capable and dynamic members of staff with the skills, knowledge and temperament to help us tackle the challenges that lay ahead. I am delighted to have been able to offer all three of the trainees' jobs with Freshwater Habitats Trust and I am excited to see what their futures hold for them; I am in no doubt that they will go on to do great things.

The team has developed and demonstrated new ways of working which I am positive we will adopt for the wider organisation. Being a relatively small organisation there is not always time to refine processes and Building Oxfordshire's Freshwater Network has given us the chance to do this.

We are enormously grateful that GRCF selected this project for financing, and I have always looked forward to Monday catch up meetings with the team as we've progressed! As I've watched the project develop, and the staff grow in skills and knowledge to deliver a successful project, it's clear that we've been able to get the establishment of Oxfordshire's Freshwater Network off to the best possible start. Not only has this provided a platform for us to deliver work on the ground but it's really helped to take the community with us.

The quality of the Team's work is perhaps best acknowledged in the fact that we've been able to get support from Natural England through the Defra Nature Based solutions to immediately continue the work and extend its value in the sphere of carbon sequestration.



65 Lizzie, Ellie, Paola and Jim (Oxford Botanic Garden) with GroWet plants by Tim Bearder

Building Oxfordshire's Freshwater Network has created a major legacy for Freshwater Habitats Trust, for people and communities, and for freshwater heritage.

We've increased the number of skilled staff within Freshwater Habitats Trust

- Providing training for our staff and trainees we have increased the resilience of the organisation
- All 6 project staff have been retained by Freshwater Habitats Trust
we have just received funding through The Natural England Nature Based Solutions for Climate Change Grant to continue our work on the Oxfordshire Freshwater Network and expand it to Buckinghamshire

Building Oxfordshire's Freshwater Network has increased our engagement with key audiences

- Building Oxfordshire's Freshwater Network has engaged local people, partners, volunteers and stakeholders in our work
- We have increased the number of people engaged with rare wetland plants and their habitats in Oxfordshire

We've increased the ability of volunteers to deliver conservation gains

- With large numbers of people engaged with our work through GroWet we are able to grow our volunteer support base and repeat GroWet in 2023
- Through providing training and support for our fen restoration volunteers we have created a more resilient future for our habitat restoration work

Building Oxfordshire's Freshwater Network has given us new information on the status of species and habitats

- We have gained valuable knowledge and experience on how to provide the best conditions for rare wetland plants and how they are best propagated
- We have carried out species surveys on our fen sites and have introduced monitoring on our newly created floodplain wetland mosaics to inform best practice going forward



Freshwater Habitats Trust's aim is to protect freshwater life for everyone to enjoy. Our vision is that all threatened freshwater plants and animals have recovered and developed sustainable populations, the UK has a functioning network of freshwater habitats: The Freshwater Network, and people value freshwater habitats and their wildlife. We deliver our conservation aims through our expert staff and our conservation, community, research and policy work.

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Freshwater Habitats Trust Registered Charity Number 1107708

Green Recovery Challenge Fund



The National Lottery Heritage Fund





Appendix:

- Appendix A: Heritage Insider Stakeholder Interviews
- Appendix B: Thames Valley Wildflower Meadow Restoration Project GRCE Report
- Appendix C: GroWet Volunteer Feedback
- Appendix D: Wetland Arts Leaflet
- Appendix E: Oxfordshire Community Foundation Demographics report
- Appendix F: Freshwater Futures CPD and IPD
- Appendix G: Heritage Insider Freshwater Futures Exit Interviews
- Appendix H: Heritage Insider Team Learning Review
- Appendix I: Heritage Insider Independent Statement

Webiste Links:

- Coverage of Hinksey Heights Big Nature Day on ITV Meridian

<https://www.itv.com/news/meridian/2022-08-29/oxfordshires-wetlands-celebrated-in-special-event-at-hinksey-heights>

- Coverage of Coleshill Floodplain Wetland Mosaic work
- <https://oxfordshireguardian.co.uk/historic-oxfordshire-and-wiltshire-floodplains-restored-for-wildlife/>
- <https://www.countryliving.com/uk/wellbeing/a35199648/positive-news-this-week/>

Press Releases:

- <https://freshwaterhabitats.org.uk/news/two-grants-received-from-governments-green-recovery-challenge-fund/>
- <https://freshwaterhabitats.org.uk/news/big-nature-day/>
- <https://freshwaterhabitats.org.uk/news/oxfordshire-people-grow-plants-help-wetlands/>
- <https://freshwaterhabitats.org.uk/news/freshwater-wildlife-floodplain-restoration-buckinghamshire/>
- <https://freshwaterhabitats.org.uk/news/home-instead-north-oxfordshire/>
- <https://freshwaterhabitats.org.uk/news/new-wildlife-habitats-will-restore-historic-oxfordshire-wetlands/>
- <https://freshwaterhabitats.org.uk/news/rebecca-pow-mp-visits-new-habitats-at-manor-farm/>
- <https://freshwaterhabitats.org.uk/news/historic-oxfordshire-and-wiltshire-floodplains-coleshill/>