LRCA Spring 2026 Newsletter

Freshwater Project Update – Spring 2026

We are pleased to share some positive progress on the Freshwater Project.

Thanks to the support of Ed McLean, Environment Consultant at SSE, we have received approval to instrument the Kinloch Rannoch Weir. This is an important step forward and we are very grateful for his assistance.

As the next stage of the work, we have requested access to historical and ongoing loch, river and burn level data from Loch Eigheach and Loch Rannoch. This data will be used solely for the Freshwater Project and LRCA activities. The aim is to build a detailed Jupyter Lab and Notebook that will establish a robust historical baseline of loch levels. We will then combine this information with other datasets such as historical weather records and SEPA surveys. This will help us understand long-term patterns and prepare for real-time monitoring in the future.

A central strand of the Freshwater Project is the development of a strong citizen science programme focused on monitoring the health of the burns flowing into Loch Rannoch and the wider biodiversity of the area. Following advice from Gordon Brown, four monitoring sites have been selected where burns enter the loch. Around twenty volunteers have already expressed interest in becoming Citizen Scientists, including local residents, visitors, university students and school pupils.

Many participants have completed, or are undertaking, the standard Riverfly Partnership training, widely used across the UK. A practical training session, delivered by Buglife and led by Caroline Howarth, will take place on 29th April at the mouth of the River Ericht. Safety is a key component of the training, and all participants will be encouraged to work in pairs while carrying out surveys.

The Riverfly methodology focuses on eight key groups of aquatic invertebrate larvae—principally caddisflies, mayflies and stoneflies—which act as indicators of water quality. Surveys involve a three-minute kick sample, supplemented by examination of the undersides of stones, and will be conducted between April and October, with three or four visits planned for each site. While this methodology is designed for flowing water, a complementary approach is being developed for monitoring the still waters of the loch itself.

Over time, this work will become increasingly sophisticated. In addition to identifying broad groups of invertebrates, we will enhance precision using machine learning tools developed by our technical expert, John Cassidy. These tools will allow Citizen Scientists to upload photographs taken on their phones and receive automated assistance with species identification. In this context, we will be testing the real-world usefulness of RICHARD (River Invertebrate Classification Helper: Automated Recognition and Determination), previously known as CADDIS.

The citizen science programme extends beyond freshwater invertebrates to build a broader picture of biodiversity across the Rannoch area—from ants and plants to moths and birds of prey. This work will complement the advanced eDNA analysis of Loch Rannoch being undertaken by Professor Bernd Hänfling and his students, as well as the long-standing observational knowledge of Gordon Brown and fellow anglers.

To support accurate identification across this wide range of species, we aim to develop a network of specialist taxonomic expertise. We are fortunate to have already begun this process with Professor George McGavin of Oxford University, who has kindly agreed to assist with spider identification, and we hope to extend similar collaborations to other groups over time.

Alongside these citizen science activities, the Freshwater Project continues to develop a range of innovative technical initiatives, including:

- The GORDON app (Gauge Observation Recorder for Depth via Optical Notation), a computer vision tool that converts images of level gauges into usable data for analysis and visualisation.
- The FLORA app (Foreign Licence Optical Recognition & Analysis), designed to support the safe and secure collection of visitor and traffic data.
- Advanced machine learning applications and Python-based education initiatives.
- The use of drones to generate high-resolution 3D models, orthophotos, and plant health assessments, alongside loch-edge photogrammetry and site monitoring.
- The use of satellite-based assets to detect environmental changes over time.
- Integration of LPWAN networks and IoT sensors for real-time monitoring using low-power, long-life devices.
- eDNA techniques to identify species and genetic relationships, including within the unique Arctic char population.

The names of the apps reflect some of the original ideas behind the project and are intended to resonate with the local community.

We are also pleased to announce that the LRCA will cover the cost of the initial drone flying online test and registration for selected citizen scientists. In addition, John will be making some of his drones available for testing, and those interested in becoming drone operators will receive training in advanced data processing techniques to ensure that drone data can be used effectively for environmental monitoring.

We are very grateful to Eleonore and Rupert for kindly permitting us to host a LoRaWAN gateway on their property. This installation now provides substantial coverage of the south side of the loch and will enable connectivity with sensors located several kilometres away.

All data generated through this work will be shared with SSE, and we have proposed that SSE data be shared with us only with their explicit permission. We have also offered to share the completed Jupyter Lab with SSE should this be of interest.

The citizen science element of the project is expected to contribute not only to scientific understanding, but also to community engagement, helping to highlight the remarkable diversity and international importance of the habitats around Loch Rannoch. It provides a valuable opportunity for residents and visitors alike to engage directly with the natural environment and to contribute to its long-term stewardship.

We will keep members informed as the project develops. If you have any questions or would like to get involved, please do get in touch.

Loch Rannoch Warden Activities

The past few months around Loch Rannoch have been a mixed bag for our visitor management operations, with wardens continuing their weekend patrols of the shoreline. We're delighted to welcome Jenny Anderson on board as a second warden, working alongside Flora, and our partnerships with FLS, the Scottish Fire and Rescue Service, and Perth and Kinross Council remain as strong as ever. The start of the season has been relatively quiet, likely owing to the weather, though we've been pleased to meet a number of new faces purchasing season permits, most of whom are familiar with the Scottish Outdoor Access Code and respecting it well. On the water, anglers have been rewarded with some good-sized pike in the 14 to 20lb range, along with some lovely trout. That said, we've noticed a marked drop in visits from our long-standing season permit holders, and their absence is being felt on two fronts: fewer permit sales, and less of the informal environmental stewardship these regulars have always quietly provided. Unfortunately, some challenges persist. Enforcing the "no fires" policy on FLS land continues to be difficult, and despite the low volume of visitors, litter, particularly along the verges, has been significant. Our wardens have also had to contend with an increasing number of argumentative anglers who refuse to purchase permits, a tiring conversation that is cropping up far more frequently than in previous years. We're hugely grateful to everyone in the community who continues to support the Loch and help us look after this special place.

Loch Rannoch Lochside Clearway

As explained at the LRCA AGM last November, work has continued with Perth and Kinross Council on the proposed rural clearway along the B846 at Killichonan, on a stretch where visitor parking has been a recurring issue for many years. PKC consulted the LRCA, local residents, councillors, emergency services, forestry, and

frontagers, and the proposal was subsequently amended, with the extents adjusted. If introduced, the clearway would prohibit vehicles from stopping, loading, or parking on the main carriageway at all times, with the usual exemptions for breakdowns, emergencies, and statutory services; lay-bys would generally remain available unless signed otherwise and verges may be included. PKC passed the paperwork to their legal department in March, and the next step will consist in a formal statutory public consultation period. We will keep the community updated as the process progresses.

Clan and Heritage Trail Revival Project

A working group is being formed to achieve a new, refreshed and refurbished Clan Trail, which will now include any extra relevant Historical, Cultural, and Natural world information at each site.
The original Trail, created by Alec Cunningham, has stood the test of time over 40 years, and his writings still hold good, though most of the sites have suffered significant deterioration. We intend to use his writing again.
Jeannie Grant produced an extensive plan to upgrade the Trail in 2012. Sadly, this never came to fruition because of a lack of available funding. Her work will now be a primary resource for us.

We also plan to produce suitable information for an App which will accompany new Interpretation Boards at each site.
Early thinking is to add two new sites, one in the village square, and another on the Black Wood shore.
We are now actively seeking another local person who will act as a Clerk of Works for the whole Project once we begin the Construction Phase.
By this point we will aim to have renewed permission from the various landowners to use and refurbish the trail sites again.