# Loch Katrine Peatland Restoration

CASE STUDY

Infrastructure investment to protect a strategic drinking-water catchment and support net zero.

**LOCATION:** Loch Katrine, Loch Lomond & The Trossachs National Park

**STATUS:** Current

NATURE POSITIVE

## Summary

Scottish Water is undertaking a 10-year programme to restore 400 hectares of degraded peatland across the Loch Katrine catchment, an asset that supplies drinking water to over 1.3 million people across Greater Glasgow and the Central Belt via the Victorian Katrine Aqueduct system. As of April 2025, phase 1 has restored more than 50 hectares, with works scheduled seasonally and paused during the bird-nesting period, resuming in October. The programme aims to reduce organic material entering the Loch during heavy rainfall (lowering treatment burden and costs), improve raw-water quality, and store carbon in support of Scottish Water's 2040 net-zero target.

## Background

Historic drainage for grazing and pressure from large deer populations damaging the vegetation have exposed bare peat and eroding pat hags on hillsides surrounding the Loch, increasing runoff and organic loading into the water supply. The restoration focuses on blocking man-made drains and reprofiling peat hags to keep more water in the landscape, stabilise peat, and reduce wash-off into Loch Katrine. The programme sits within a wider land-management plan with Forestry and Land Scotland (FLS), alongside major native woodland creation across the surrounding area in the Loch Lomond and Trossachs National Park (LLTNP).

## Strategy

A whole-catchment, place-based approach is being adopted. Peatland restoration is integrated with woodland expansion within a protected landscape to meet water-quality, biodiversity, and climate objectives. This approach ensures that land uses are planned together and prevents fragmented management.

A cross-sector partnership has been established. Scottish Water is working with Forestry and Land Scotland (FLS), the Loch Lomond and Trossachs National Park Authority (LLTNPA), and Peatland ACTION to enhance their land management plan. Joint working reduces duplication and enables different organisations to coordinate their roles effectively.

## Investment

Investment is being leveraged through public climate finance. The project is funded by Peatland ACTION, which is financed through the Scottish Government's Climate Change Plan and its commitment of £250m to restore 250,000 hectares of peatland by 2030. This funding helps overcome cost barriers and provides a defined source of capital.

Investment is also targeted at upstream source control. The focus is on reducing organic matter at source to avoid higher downstream costs and improve operational efficiency, thereby ensuring the continuation of a high-quality drinking water supply. By acting at source, the project reduces the need for additional treatment infrastructure.

## Management

Management is overseen through multi-stakeholder governance. Delivery is coordinated with FLS, LLTNPA, and Peatland ACTION under a land management plan that focuses on creating a "world-class drinking water catchment." Clearly defined roles and joint oversight help maintain consistent standards throughout the programme.

Monitoring and learning are integral components of the project. A collaboration with the University of Stirling is deploying field sensors and undertaking research to quantify hydrological and carbon benefits and to inform adaptive management over the course of the decade. Continuous data collection supports evidence-based decisions and adjustments.

The carbon benefits of the project are significant. Restored peatland functions as a carbon sink, which supports Scottish Water's pathway to achieving net zero by 2040.