



“We chose PowTechnology IoT technology because it was well-proven in other level applications. It benefitted land managers impacted by dam-building almost immediately, saving the effort of physical checks and allowing us to help them quickly. This technology helps minimise the impact of dams on agriculture and infrastructure and improves peoples’ willingness to coexist with this protected species, with all the benefits that their wider presence in the river catchment can bring, such as wetland habitat creation and flood mitigation. Each site where these monitors are deployed is unique. PowTechnology worked quickly with us during each installation to set-up the dashboard and alerts, allowing us to respond rapidly to emerging beaver issues at sensitive sites”

DR ROO CAMPBELL
Mammals Adviser, NatureScot



The task

NatureScot, (formerly Scottish Natural Heritage) is the public body responsible for Scotland’s natural, genetic and scenic diversity, including managing potentially conflicting needs of beavers, other species, landowners and infrastructure in relation to dam building. Physical checks of drainage channels and watercourses for activity can be a time-consuming burden.

The result

This digital transformation solution reduces the burden on land managers of physically checking water levels. Action can be taken much sooner, including an occasion when a beaver was relocated under license within 10 days of a new dam being identified in a drainage ditch. This minimised the negative impacts of beaver activity, whilst allowing the beaver to thrive in a new location.

The solution

PowTechnology solar-powered IIoT technology was installed at multiple locations. Water depth is reported regularly and visible to NatureScot via a secure cloud. Alerts are sent to nominated individuals when levels exceed or fall 1cm below user-defined thresholds, so that timely action can be taken.

Summary

- ▬ Balances conflicting needs on beaver territories
- ▬ Saves land managers’ time
- ▬ Scotland’s biodiversity is enhanced
- ▬ Less intrusive for beavers
- ▬ Sensitive locations around agriculture and infrastructure are protected