

Monitoring and managing your watercourses is an increasingly important part of farming's role in land stewardship – flood management plays a major part

Flooding is an issue affecting not just farming, but the wider economy as a whole and is estimated to cost the UK £1.4bn per annum. Understanding how the rivers and streams around you behave by monitoring their levels in response to rainfall, can help you put in place mitigating measures, help avoid losses, and avoid putting people and livestock at risk. It can also underpin your Natural Capital management plan.

Because water courses link us to those upstream and downstream of where we farm it is important to understand our part in their management and how that can affect others. Avoiding a problem for ourselves often passes it on and magnifies this for others. Not forgetting that the data most useful to you and to get as much warning as possible, might come from land upstream of yours – so working with your neighbours is key.

Where you have infrastructure such as road, rail or canals crossing your land, you may also have the liability for ensuring that gulleys and culverts are functioning as they should. Monitoring them and being able to spot “abnormal” behaviour is a key part of delivering that responsibility.

With the removal of the existing subsidy schemes and the move towards Natural Capital, it will pay to understand how your land and rivers affect the wider catchment area, as part of your duty to manage the land for the Public Good. As prevention of flooding is obviously the best policy, there may even be opportunities to use the data you gather to justify putting in place Natural Flood Management measures on your land that will earn credits within any Natural Capital schemes. It will also feed into how you manage water quality, another important aspect of Natural Capital.

Whilst SEPA has a network of over 500 gauging stations across Scotland, they are placed well down stream where the flow is greater and normally close to the asset/town at risk. There is considerable lag between the rain falling on your land and the impact being seen on these gauges. To give communities as much warning as possible, your data will again be invaluable.



All the above mean that it is not just a passing interest to monitor the level of rivers and streams as they cross your land. It is important financially, for safety and for the environment. A simple way of doing this is to automate the data gathering by installing a sensor, which is connected to the internet and delivers data and alarms to your phone and PC. Link this to rainfall data and you start to build a picture of how your land responds and what you can do to improve matters for yourself and your neighbours.