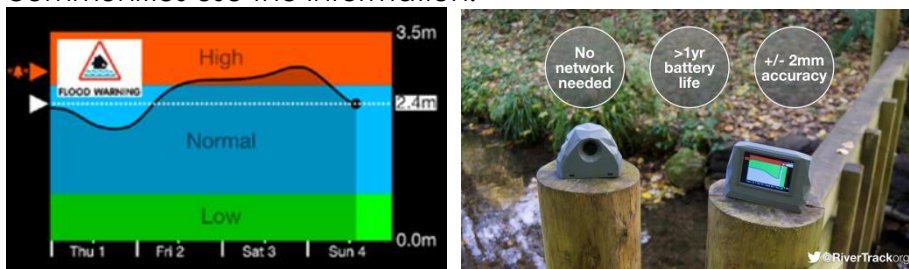# RiverTrack Flood Alerting Pilot Project

Introduction

In Scotland, the winter storms of 2015-16 once more brought home the disastrous impact flooding can have on individuals and communities.

Access to real time river level and flood alerting information is really important for all communities with localised flood risks. This helps them be aware of the potential for flooding and to gain time to be able to respond and prepare.

RiverTrack is a new flood alerting device being piloted with two flood risk communities to test its ease of use, and practical application to raise awareness and provide a flood alert, and to discover how different communities use the information.

RiverTrack visual display

For example, community actions could include:

- Having a community display for all to see in an agreed location.
- Agreeing a trigger level at which the community can take action.
- Integrating information with new or existing emergency plans.

What do we want to achieve?

The Scottish Flood Forum (SFF) is working with RiverTrack, the Scottish Environment Protection Agency (SEPA) and RAB Consultants to pilot the use of the RiverTrack system as a community controlled flood alerting system. With sponsorship from SEPA, the devices will be provided free of charge by the SFF to a number of households who wish to take part in the RiverTrack pilot project.

We would like to learn how easy you find the system to use and find out how you would plan to use it to make decisions and take actions, both as a community or as individuals.

If the devices prove successful, we would work to leave the community with the ability to monitor water levels and to take action when trigger levels are reached.

How can you be involved?

The SFF and partners would ask you to be involved in two community meetings. One at the beginning of the project (June/July 2017) to be shown

the devices and discuss and agree where they could be deployed. The other at the end (December 2017) to give feedback and discuss how and where the devices can best be used.

A representative of the community /community group will be needed, to act as a point of contact for the SFF and RiverTrack when they install and check the devices.

The SFF will be in touch regularly throughout the project to support the group discussing how they can make best use of the information and to ensure everything is working.
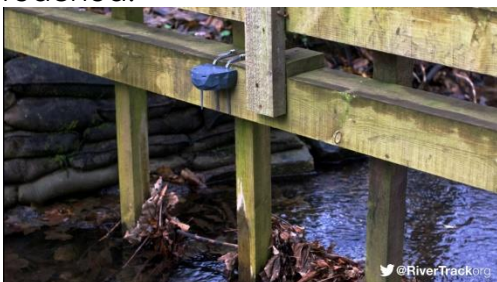
What is RiverTrack?
- RiverTrack is a device that gives information on river levels to individuals and isolated communities.
- It has a very simple indoor display device, a number of which can be paired with one local outdoor river sensor.
- It has a weather proof ultra-sonic water level sensor with low power radio.

What are the benefits?
The RiverTrack pilot project will answer this question, with your help, but early trials show

- RiverTrack does not require any technical or computer expertise to operate.
- It gives peace of mind, providing a continual display of river levels.
- It could help you and your community improves how you respond to flood risk.
- It could help to minimise the damage caused by flooding.

The project will provide an opportunity to come together and discuss what plans or actions you would want to have in place before an alarm level is reached.

RiverTrack sensor

How does RiverTrack work?

The techy bit
- RiverTrack works by sending water level information direct to the individual or community.

- RiverTrack uses backup batteries to keep functioning during a power cut.
- RiverTrack uses a licence-free low power radio frequency.
- RiverTrack can work with or without an internet or cellular connection.

What will RiverTrack do?
- A sensor is attached to an agreed point on the stream or river and is paired with a number of receiver devices.
- RiverTrack provides people with local, time sensitive information about their local watercourse state.
- RiverTrack shows easy to understand water level information.
- A trigger alert level can be set so that an alarm sounds if this is reached.
- Can help reduce the impact of flooding by giving individuals and communities time to prepare for, and respond to flooding.

Who are we?

Scottish Flood Forum:

The Scottish Flood Forum (SFF) will be the point of contact for those involved in the RiverTrack trial and they will provide free advice and information. It seeks to help communities and individuals understand the risks and consequences of flooding in their area and ensure they are effectively and appropriately supported to recover and to become more resilient.
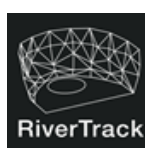
RiverTrack

RiverTrack is a company founded by software developer, technologist and designer Gary Martin. The company is part of a Scottish Government innovation programme called CivTech® and it won the recent SEPA flood forecasting & warning challenge.

RAB Consultants

RAB Consultants are specialists in flood early warning systems, flood risk and resilience activities.

SEPA

SEPA is Scotland's national flood forecasting, flood warning and strategic flood risk management authority. Helping reduce the impact of flooding on people's lives is at the heart of SEPA's aims.