

## Case Study: Building Resilience with Community Flood Alerting

*This case study gives an example of engaging flood risk communities using RiverTrack community flood alerting systems.*

### Introduction:

The Scottish Flood Forum (SFF) with support from the [Scottish Environment Protection Agency](#) (SEPA) piloted RiverTrack community flood alerting systems in two flood risk communities, Menstrie and Moniaive. The aim was to evaluate the tool, review its usefulness and use it as a means to give additional development support to the local flood risk communities. [RiverTrack](#) provides a hyper local, affordable, user friendly community flood alerting tool using a very simple indoor display device paired with local outdoor river sensors. Its ease of use and accessibility makes it an ideal tool for communities that are at a risk of flooding from local water courses, but do not receive a [SEPA flood alert or warning](#).

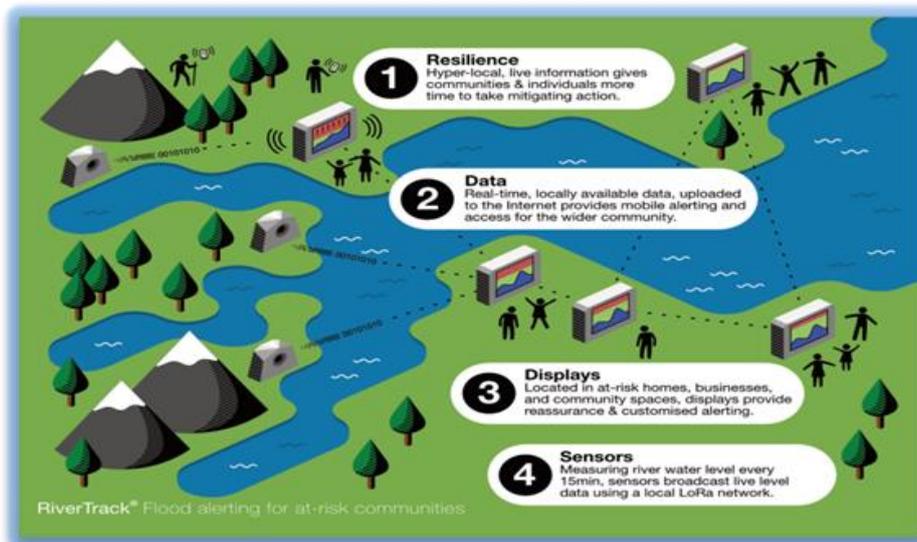


Figure 1: RiverTrack

The SFF provided a single point of contact for both communities, built links with local authority staff, coordinated a proactive communications approach and led a successful programme of community engagement that:

- Evaluated the usefulness of RiverTrack and its ease of use by community members and groups through:
  - co-ordinated house visits;
  - organised community events;
  - gathered stakeholder feedback.
- Supported both communities to consider how to use RiverTrack effectively for their particular situation:

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- Supported the community in Menstrie to start and develop a community resilience group using the RiverTrack water level monitor as a catalyst for action.
  - Supported the existing Moniaive Resilience Group to integrate the RiverTrack water level monitor into its existing resilience plan.
- Provided support to flood risk communities through core SFF services on insurance advice, community resilience and self-help action such as property level protection and household flood plans.

**Good Practice Point:**

Mapping the key social assets and potential users of a community flood alerting system is an important first step to engaging the flood risk community.



Figure 2: Menstrie

The water level information recorded by RiverTrack was used by both communities to develop a better understanding of flood risk and to take action to prepare for flooding. It is also publicly available via RiverTrack [community maps](#) meaning people can access the information when they are away from home.

**Good Practice Point:**

Having a lead point of contact in the community is important to build engagement and relationships in a flood risk community.

**Community Impact:**

The SFF gathered feedback from both communities on the usefulness of RiverTrack. **99%** of respondents stated that their ability to prepare for flooding had increased and they wanted to continue using the system and access support from the SFF. The following comments were given by community volunteers.

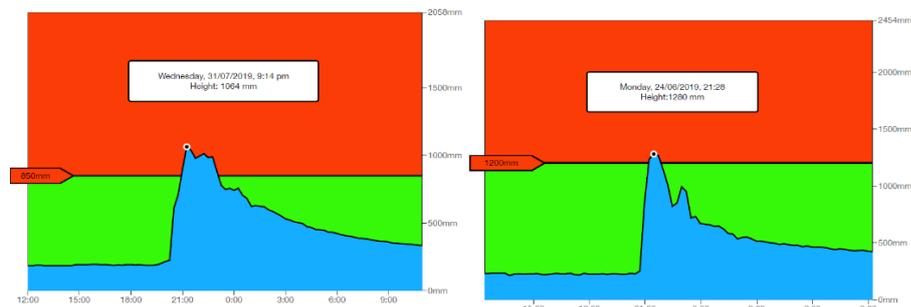
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*“RiverTrack is definitely helpful to prepare for flooding and I feel we are better prepared as a result of having the system.”*

*“By being part of the furniture in my house such as the kitchen or living room, the device is now an integral part of bringing attention to river levels and this can provide great benefit.”*

*“Can we get every flood risk household a device to increase coverage and awareness of flooding and encourage better resilience to flooding.”*



**Figure 3: Alarms**

The images above show two separate events where community alerting level thresholds were exceeded.

### **Good Practice Point:**

Good guidance on the use of River Track by the community is important to ensure knowledge is shared effectively so that the alerting system can be incorporated into wider community resilience.

Cabinet Secretary for Environment, Climate Change and Land Reform Roseanna Cunningham said: *“It’s great to see the success of RiverTrack in Dumfries and Galloway and in Clackmannanshire where it has helped communities prepare for flooding. Individuals living in these areas have been able to gain a better understanding of their potential flood risks so they can take the necessary action to protect themselves, their property or their business”.*

### **Community use of RiverTrack data:**

In addition to the core project, the SFF supported Menstrie Primary School and [The Conservation Volunteers](#) to get involved with activities that promote an awareness of flooding and community flood plans. In addition, SFF provided support to Menstrie Care Home on using The RiverTrack data as part of their emergency plan and assessing the building for property flood protection with the local authority.

### **Summary:**

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This project showed that with the right approach and support, a hyper-local community-based flood alerting system can increase individuals' and communities' ability to be better prepared for flooding. It also demonstrates that a locally controlled community flood alerting system can provide a platform to help build better community resilience.

### Good Practice Point:

Working with the local volunteers to understand river levels and risks of flooding is vital to develop agreed community actions to prepare for flooding.



Figure 4: RT Devices

### Next Steps:

As a result of the successful pilot, the SFF continues to pursue funding opportunities to build further community flood alerting projects in locations where the technology can be deployed successfully. To date we have received funding from the [SEEN Resilient Communities Fund](#) to engage flood risk communities in Perth ([Capability Scotland](#)), Blair Atholl and Fintry. These sites have all been installed successfully and the SFF is working with all partners to build better community flood resilience. The use of RiverTrack as a low cost, user friendly flood alerting tool is providing a good foundation to engage flood risk communities and is helping people to be better prepared for flooding.

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### Acknowledgements:

The authors would like to thank all the community volunteers in Menstrie and Moniaive who made this case study possible. In addition, the SFF would like to thank both local authorities, RiverTrack, SEPA and [Rabs Flood Risk Consultancy](#) for all their valuable contributions.

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