

## Managing Flood Risk in East Belfast

### A History of Flooding

East Belfast has a history of severe flooding with recent significant flood events occurring on 12<sup>th</sup> June 2007 and the 16<sup>th</sup> August 2008. Following this widespread flooding the Rivers Agency has been carrying out appraisals of flood risk from the Loop, Knock and Connswater rivers. The results of assessments are as follows:

- Sections of the Loop, Knock and Connswater rivers require increased culvert capacity;
- Reaches of the Loop, Knock and Connswater rivers require flood defences to contain flows;
- Flood storage may also be considered in order to reduce flows in a flood event.

### Flood Alleviation in East Belfast

Although it may not be possible to prevent flooding entirely, the Rivers Agency is committed to managing flood risk from the Loop, Knock and Connswater rivers. 'Managing flood risk' means reducing both the likelihood of flooding and the impacts of flooding on people and properties when it does occur.

It is planned to undertake works on all three rivers over a period of time as resources permit; detailed design work has commenced on the first of these rivers – the Loop River. The aims of the proposals are as follows:

- Reduce flood risk to people and properties in East Belfast;
- Consider the interests of individuals and organisations in East Belfast;
- Consider climate change in scheme design, to try to offset future changes in flood risk.

The Rivers Agency is working in partnership with the East Belfast Partnership, to ensure an integrated design of the flood alleviation measures with the environmental Connswater Community 'Greenway' Project. Examples, of the 'partnership' ethos include sharing of available information and developing solutions which have a dual design purpose (i.e. designing any new river channels to ensure they can convey the appropriate volume of flood water whilst enhancing the urban environment of East Belfast).

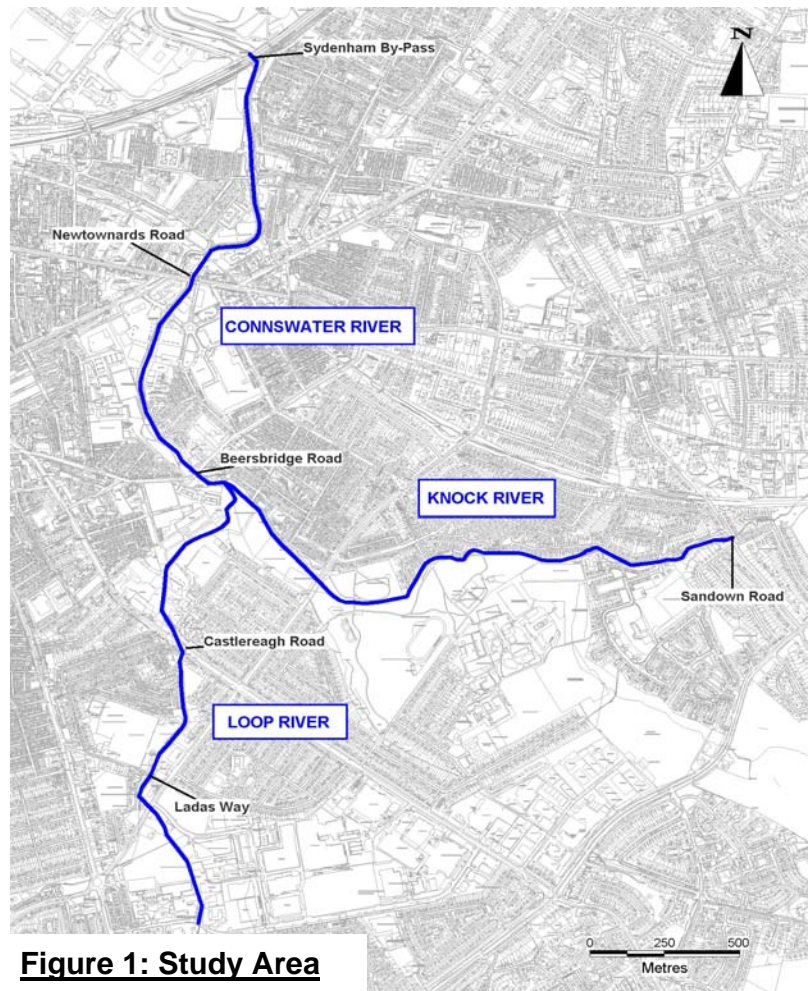


## Where we are proposing works

We are aiming to reduce flood risk arising from the Loop, Knock and Connswater rivers along the reaches shown on Figure 1. This is a total river length of approximately 6km, with flood alleviation works proposed only along those reaches which contribute to flood risk.

The risk of flooding from the Loop and Knock rivers is at its greatest when heavy, intense rainfall occurs over East Belfast. The risk of flooding from the Connswater river, relates not only to this type of rainfall event but is also generated from the risk of extreme surge tides from the Irish Sea travelling up Belfast Lough.

The appraisal studies into flood risk from the Loop, Knock and Connswater rivers have also identified possible flood alleviation works along reaches outside those shown on Figure 1. The outline design and viability of these works is currently being developed.



**Figure 1: Study Area**

## The Programme

The detailed design of the Loop river flood alleviation measures started in January 2009 and is likely to take 12-18 months. During this time ground investigation, topographic surveys and landowner consultations will be carried out. This data collection and consultation work will be throughout the study area shown on Figure 1, to support the wider East Belfast flood alleviation proposals.

## Information

Engineering design consultants **Jacobs** and **McAdam Design** are undertaking the integrated design of the Flood Alleviation proposals and the Connswater Community 'Greenway' on behalf of the Rivers Agency and East Belfast Partnership, respectively. Further information can be obtained from:-

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