



Report to Economic and Environmental Wellbeing Scrutiny & Policy Development Committee 30th November 2017

Report of: Director of City Centre Development

Subject: Protecting Sheffield from Flooding - Programme Update

Author of Report: James Fletcher, Flood and Water Manager (tel: 2735847)

Summary:

The Committee has requested an update on the Protecting Sheffield from Flooding capital investment programme to enable it to note progress on the delivery of the programme.

Type of item: The report author should tick the appropriate box

Reviewing of existing policy	
Informing the development of new policy	
Statutory consultation	
Performance / budget monitoring report	
Cabinet request for scrutiny	
Full Council request for scrutiny	
Community Assembly request for scrutiny	
Call-in of Cabinet decision	
Briefing paper for the Scrutiny Committee	X
Other	

The Scrutiny Committee is being asked to:

Note progress on the delivery of the Protecting Sheffield from Flooding investment programme.

Category of Report: OPEN

Report of the Director of City Centre Development – Protecting Sheffield from Flooding - Programme Update

1.0 Introduction/Context

- 1.1 The City Council is working in close partnership with the Environment Agency (EA) to deliver a programme of capital schemes valued at over £100 million to protect Sheffield from flooding.
- 1.2 The schemes will invest in the city's flood and drainage infrastructure and aim to protect communities as well as supporting commercial and housing growth in Sheffield's main river valleys.
- 1.3 The Committee has requested an update on the progress being made by the partnership in delivering the capital investment programme.

2.0 Main body of report, matters for consideration, etc

2.1 Lower Don Valley Flood Defence Scheme

The scheme is scheduled to be fully completed in January 2018.

2.2 Upper Don Valley Flood Alleviation Scheme and Sheaf Catchment Flood Alleviation Scheme.

- 2.2.1 A short list of option measures to protect the Upper Don, Loxley, Sheaf and Porter valleys was announced and published on the Council's website in March 2017. This followed a period of public consultation on flood protection options in 2016. A report on the consultation was also published alongside the short list of options.
- 2.2.2 The project team has further assessed the short listed options and drawn up preferred measures for delivery. Those measures are shown in the maps provided at Appendix A to this report. They will provide vital infrastructure to manage river water across the Don and Sheaf catchments. The proposals start at source in the uplands above the city using natural flood management measures. The Environment Agency and Yorkshire Water are also exploring the use of upland reservoirs to store floodwater. Plans are to control river flow through the city by managing urban floodplains – holding floodwater in open spaces away from homes and businesses; removing pinch-points and building new flood defences.
- 2.2.3 The Council/EA partnership has established a Sheffield natural flood management (NFM) working group with relevant trusts and organisations operating in this field. The group aims to promote and co-ordinate the delivery of NFM measures in the Upper Don and Sheaf catchments.
- 2.2.4 The Council/EA partnership understands that new flood defence assets will need looking after once they're built as well as keeping the river

channel clear of debris and free flowing. In some cases, defences will need to be activated ready for when a storm hits. The partnership is drawing up joint plans for maintaining and operating Sheffield's new flood defence assets together with plans for maintaining the river channel.

2.2.5 At present, the partnership hasn't secured all the funds needed to cover the full cost of the Upper Don and Sheaf catchment schemes that are estimated at £53 million for the Upper Don and £40 million for the Sheaf scheme. The schemes qualify for £22.5 million of Defra flood grant in aid, subject to the approval of business cases by the Environment Agency, leaving a funding shortfall of £70.5 million.

2.2.6 The partnership continues to work with government to secure the funds to finance the full schemes. In the meantime, the Council plans to deliver the schemes in phases over a five year plus period as funding packages become available. The project team is working up an initial phase for the Upper Don scheme funded by the Sheffield City Region investment fund and Defra flood grant-in-aid.

2.3 Sheffield Watercourses – Culvert Renewal Scheme

2.3.1 Sheffield's network of underground culverted watercourses is old and has deteriorated to such an extent that it presents a risk of flooding to communities and major roads across the city. The network forms an important part of the city's urban drainage system.

2.3.2 Following an appraisal of 48 culverted watercourses citywide, engineering consultants have identified 9 culverts that present the highest risk of collapse and flooding to surrounding communities. They are:

1. Shay House Lane Water Course (WC), Stocksbridge
2. Fox Hill Road / Penistone Road Water Course (WC), Wadsley Bridge
3. Tongue Gutter (Upper Reach) WC, Parson Cross
4. Pack Horse Lane WC, High Green
5. Allen Croft Brook - Hole House WC, Stocksbridge
6. Fulwood Road WC, Fulwood
7. Crimicar Lane WC, Fulwood
8. Deer Park WC, Stannington
9. Dobcroft Road / Pingle Avenue WC, Millhouses

2.3.3 The Council's engineering consultants have drawn up a scheme for renewing these culverts thereby preventing collapse and subsequent flooding. Proposals are to install a new structural lining to the culverts at an estimated cost of £3 million. The scheme qualifies for £2 million of Defra flood grant subject to EA approval of the business case. The remaining £1 million of funding will be contributions from partner investors such as the City Council. Plans are to start culvert renewal work in August 2018.

2.4 Three Brooks Environmental Scheme, Manor, Sheffield

2.4.1 The Council is sponsoring a unique pilot scheme in the east of the city to provide sustainable drainage and revitalise local watercourses – the Car Brook, Kirkbridge Dyke and Jervis Lumb. The scheme is linked to the social housing regeneration of the Manor and Arbourthorne districts of Sheffield and aims to reduce the risk of flooding to downstream districts, such as at Darnall, as well as creating natural watercourse habitats.

2.4.2 Plans are to deliver the scheme in phases with construction scheduled to start in 2018.

2.5 Blackburn Brook Flood Alleviation Scheme

2.5.1 The scheme's objective is to increase the standard of flood protection to homes and businesses in the Blackburn Brook valley passing through Chapeltown and Ecclesfield. The Council plans to award a contract to carry out a scheme feasibility study and options appraisal in December 2017. The contract will span an 18 month period.

3.0 **What does this mean for the people of Sheffield?**

3.1 The Protecting Sheffield from Flooding capital investment programme will deliver the following benefits for the people of Sheffield:

- a. Safer homes and businesses.
- b. Resting assured, knowing that plans are in place for dealing with heavy rainfall - not being anxious when it rains
- c. Potential for cheaper insurance premiums.
- d. Better public health and safety.
- e. Less disruption to travel.
- f. More affordable homes in desirable locations.
- g. Confidence for existing businesses to expand and prosper in Sheffield's river valleys.
- h. More jobs in prime locations.
- i. Outdoor Sheffield – cleaner rivers with access to more recreation and heritage attractions.
- j. Potential access to renewable cheaper energy.

4.0 **Recommendation**

4.1 The Committee is asked to note progress in delivering the Protecting Sheffield from Flooding programme and provide views and comments.