Inverclyde council

AGENDA ITEM NO. 12

Report To:	**Environment & Regeneration Committee**	**Date:**	**18 January 2018**
Report By:	**Corporate Director Environment, Regeneration & Resources**	**Report No:**	**ERC/ENV/WR/17.320**
Contact Officer:	**Steven Walker**	**Contact No:**	**714828**
Subject:	**Flood Risk Management – Coves Burn, Gourock**		

1.0 PURPOSE

1.1 The purpose of this report is to update the Committee on the progress of the Council's Flood Risk Management Scheme for Coves Burn, Gourock.

2.0 SUMMARY

2.1 The Council has a significant programme for the investigation, design and construction of various flood prevention schemes within Inverclyde. Coves Burn, Gourock forms part of the schemes outwith the Central Greenock, and is funded by the Scottish Government and Inverclyde Council.

2.2 Following detailed hydrological studies by the Council's External Consultant, and works by Inverclyde Council, and Scottish Water, the following should be noted:

- Scottish Water's works in 2014 delivered capacity enhancements to their foul sewer network and as a result have reduced the occurrence of flooding to properties in Steel Street.
- Inverclyde Council has installed a safety screen to prevent ingress of large debris and unauthorised access to the outlet of the culvert on Steel Street/Cove Road.
- Reducing flows in the Coves Burn by attenuating the flow from Coves reservoirs would have minimal impact on the overall flow in the culvert. Accordingly, the upsizing of the culvert, as per the original outline proposal is not being taken forward as a scheme, as the expense of upsizing the culvert is disproportionate to the benefits provided.
- It is recommended to carry out further coastal studies to determine the extent of tidal flooding, which would consider property level protection for potentially affected properties on Steel Street/Cove Road.
- The positive actions described above have achieved the original objectives of flood risk management. Consequently, it is no longer necessary to commit approximately £300,000 of specific grant from Scottish Government. This grant can be released back to the Scottish Government. This project formed part of the overall priority list of 42 flood protection schemes for Scotland under Cycle 1 of the Flood Risk Management (Scotland) Act 2009.

3.0 RECOMMENDATION

3.1 That the Committee note the positive interventions which have resolved this flood risk at Coves Burn and the consequent release of unspent grant.

Willie Rennie
Head of Environmental & Commercial Services

4.0 BACKGROUND

4.1 The Council has a significant programme for the investigation, design and construction of various flood prevention schemes within Inverclyde, both as part of the Central Greenock Flood Prevention Project, and a number of schemes outwith the Central Greenock area.

4.2 The Council is a Member Authority of the Clyde & Lomond Local Plan District (CaLL Group). The CaLL Local Plan District is a partnership of ten Local Authorities, with Glasgow City Council as lead. The CaLL Group published its "Local Flood Risk Management Plan" (LFRMP) in June 2016; the publication of the Plan is an important milestone in implementing the Flood Risk Management (Scotland) Act 2009 and improving how we cope with and manage flood events in the CaLL District. The Plan translates this legislation into actions to reduce the damage and distress caused by flooding over the first planning cycle from 2016 to 2022.

4.3 There are a number of schemes arising from the LFRMP, which are outwith the Central Greenock Flood Prevention Plan, and Coves Burn, Gourock is one such scheme.

4.4 At the Environment & Regeneration Committee of 31 August 2017, it was agreed that a separate report would be brought to this Committee with detailed recommendations as to the scope of works required for the Coves Burn.

4.5 The original proposal back in 2014 was to upsize the existing surface water culvert at Steel Street/Cove Road. However, at that time, Scottish Water had proposals to upgrade their foul sewer network at Steel Street/Cove Road to reduce the incidence of property flooding. Discussions took place with Scottish Water to determine the practicality of Inverclyde Council's proposed works being carried out in parallel with Scottish Water's works, however, it was agreed that Scottish Water would proceed with their works and Inverclyde Council further review their plans.

4.6 Following the above, a consultant was awarded a commission to progress a detailed design on the Coves Burn as part of three other flood protection schemes within Inverclyde under Cycle 1 of the Flood Risk Management (Scotland) Act 2009.

4.7 The consultant has completed detailed hydrological studies on the Coves Burn, the original proposal to upsize the culvert at Steel Street, as well as further subsequent analysis on the possibility of attenuation of water upstream of Steel Street; the following was concluded:

- The study noted that the culvert outlet was at risk of blockage from material being washed in from the River Clyde and this could cause additional flooding as the capacity of the culvert would be reduced. There was also the risk of people gaining unauthorised access to the culvert from the beach as the culvert end was open. Consequently the study recommended that a grill should be installed over the end of the culvert to prevent access and also to prevent any additional material or debris being blocked up the culvert.

- Attenuation of flows in the Coves Burn by regulating the flow from the upstream Coves Reservoirs was considered as an alternative option. However, lateral inflows entering the culvert downstream of the Reservoirs account for more than four times the flow in the culvert from the Reservoirs, consequently this negates any benefit achieved by regulating the flow form the Reservoirs.

- The study concluded that the expense of upsizing the culvert is disproportionate to the benefits provided.

- Property Level Protection was considered; however the properties on Steel Street are not assessed to be at risk of flooding from the culvert as this would only affect the road. However, the study noted that the wall along Cove Road only offers protection for the 1 year high tide level, and there is a risk of flooding to some properties on Steel Street and Cove Road in certain tidal conditions.

5.0 CURRENT POSTION & PROPOSALS TO COMPLETION

5.1 The Committee is asked to note the following:

- Scottish Water's works in 2014 delivered capacity enhancements to their foul sewer network and as a result have reduced the occurrence of flooding to properties in Steel Street.

- Inverclyde Council has installed a safety screen to prevent ingress of large debris and unauthorised access to the outlet of the culvert on Steel Street/Cove Road.

- The hydraulic modelling has shown that the upsizing of the culvert would not increase the overall level of protection to the houses on the Steel Street as they would still be at some risk from tidal flooding. Reducing flows in the Coves Burn by attenuating the flow from Coves reservoirs would have minimal impact on the overall flow in the culvert. Accordingly, the upsizing of the culvert, as per the original outline proposal is not being taken forward as a scheme, as the expense of upsizing the culvert is disproportionate to the benefits provided.

- It is recommended to carry out further coastal studies to determine the extent of tidal flooding, which would consider property level protection for potentially affected properties on Steel Street/Cove Road.

- Officers are liaising with Scottish Government/SEPA as it is likely that a significant proportion of the grant funding for the Coves Burn scheme will have to be returned as the current scheme proposals have departed substantially from the original proposals upon which the priority ranking and grant was assessed. This project formed part of the overall priority list of 42 flood protection schemes for Scotland under Cycle 1 of the Flood Risk Management (Scotland) Act 2009.

- The costs of the hydrological studies/design and installation of the grill equate to £25,000. Consequently as the grant was 80% funded by the Scottish Government and 20% by Inverclyde Council, with an original budget of £400,000, Inverclyde Council will be returning £300,000 to the Scottish Government.

6.0 IMPLICATIONS

6.1 Finance:

One-off costs:

Cost Centre	Budget Heading	Budget Years	Proposed spend this report (£000s)	Virement from	Other comments
Flooding Strategy	Outwith Central Greenock Flood Prevention Schemes	2013/19	320 80 400 20 5 25 (300) 75		Funding: Scottish Government Grant Inverclyde Council Total Budget Spend: Scottish Government Inverclyde Council Total Implications: Scottish Government Grant Foregone Inverclyde Council for Property Level Protection

Annually recurring costs:

Cost Centre	Budget Heading	Budget Years	Proposed spend this report (£000s)	Virement from	Other comments
N/A					

Legal

6.2 There are no legal implications arising from this report.

Human Resources

6.3 There are no specific HR implications arising from this report.

Equalities

6.4 As this report does not involve a new policy or a new strategy, there are no equalities issues arising.

Repopulation

6.5 The delivery of the projects identified in this report will assist in making Inverclyde a more attractive place to live and hence contribute to the Council's repopulation agenda.

7.0 CONSULTATIONS

7.1 The Chief Financial Officer, Head of Legal & Property Services, and the Corporate Procurement Manager have been consulted on the contents of this report.

8.0 LIST OF BACKGROUND PAPERS

8.1 None.