

**Report To:** Environment & Regeneration Committee  
**Date:** 17 January 2019

**Report By:** Corporate Director Environment, Regeneration & Resources  
**Report No:** ERC/ENV/MM/17.345

**Contact Officer:** Steven Walker  
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**Subject:** Flood Risk Management – Update Report 14

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## 1.0 PURPOSE

- 1.1 The purpose of this report is to update the Committee of the progress on the Council's flood risk management programme.

## 2.0 SUMMARY

- 2.1 The Council has in place 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.
- 2.2 The progress of the Central Greenock Flood Prevention Schemes is detailed in paragraph 4.4. The works at Crescent Street are complete and the Eastern Line of Falls is currently being designed.
- 2.3 The progress of the Flood Prevention Schemes outwith Central Greenock is detailed in paragraph 4.5. Design work is complete for schemes at Bouverie Burn, Port Glasgow and Gotter Water, Quarriers. Design is progressing at Glenmosston Burn, Kilmacolm. Scottish Water, as lead, is progressing with the Integrated Catchment Study for Inverclyde. Scottish Water works in the Bull Ring and Inverkip Street are complete in respect of reducing the incidence of flooding at the Oak Mall, Greenock. Transport Scotland has completed their investigations into the flooding issues at A8 East Hamilton Street and a detailed design solution is progressing.

## 3.0 RECOMMENDATIONS

- 3.1 That the Committee note the current progress on the Central Greenock Flood Prevention Schemes.
- 3.2 That the Committee note the current progress on the Flood Prevention Schemes out with Central Greenock.

**Martin McNab**  
**Head of Environmental and Public Protection**

## **4.0 BACKGROUND**

- 4.1 The Council has in place 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 In 2014, the Scottish Government awarded grant funding to Inverclyde amounting to £1,743,466 for the Central Greenock Flood Prevention Project (comprising a number of discrete schemes) – this represented 79% of the original estimated total cost for the Project at £2,216,000. The balance of the funding (£472,534) was to come from the previously approved Flood Action Plan. The next phase of the Flood Prevention Project Outwith Greenock is funded by the Scottish Government, amounting to £932,000; the balance of the funding (£494,000) comes from the previously approved Flood Action Plan, giving a total funding of £1,426,000.
- 4.3 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” 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. There are a number of schemes arising from the Plan, which are outwith the Central Greenock Flood Prevention Plan.

4.4 The Central Greenock Flood Prevention schemes are summarised in the table below:

<b>Scheme</b>
<b><i>Central Greenock Flood Prevention Plan</i></b>
<p><b>Completed:</b>            Crescent Street – Automatic Trash Screen (including maintenance)            Crescent Street – Additional Capacity            Drumfrochar Road – Replacement Culvert            Aberfoyle Road – Flow Control            Kings Glen – Attenuation            Mearns Street – Flow Control            Brougham Street – Additional Capacity            West Station – Additional Capacity            Lady Alice Pond – Automatic Trash Screen            Craignowe Burn – Automatic Trash Screen            Bouverie Burn, Port Glasgow – Automatic Trash Screen            Devol Burn, Port Glasgow – Automatic Trash Screen            Oak Mall, Greenock (Scottish Water)            Kilblain Street, Oak Mall flood prevention (Scottish Water)            Crescent Street – Additional Capacity</p>
<p><b>Construction Stage:</b></p>
<p><b>At Design Stage:</b>            Eastern Line of Falls – Capacity Improvements</p>

- *Crescent Street.* The revised scheme comprises of an overland route through a walled swale and then along the footpath under the railway bridge and back into the existing culvert at Crescent Street. Capacity improvements on the (Old) Eastern Line of Falls to clean out and reinstate the watercourse are currently being designed.
- *Oak Mall, Greenock:* Phase 1 of the Scottish Water works at the Bullring Roundabout are complete. Phase 2 works on the A78 at Inverkip Street are complete. These phases reduce the flooding incidences, however Scottish Water are in consultation with Council Officers to design another phase to further reduce the flooding at the Oak Mall.

4.5 The Flood Prevention Schemes outwith Central Greenock are summarised in the table below:

<b>Flood Prevention Plan Outwith Greenock</b>
<p><b>Completed:</b>            Glasgow Road, Port Glasgow – Minor Improvement            Natural Flood Management Study, Glen Moss, Kilmacolm</p>
<p><b>Construction Stage:</b>            Bouverie Burn, Port Glasgow Phase 1, expected start April 2019.</p>
<p><b>At Design Stage:</b>            Gotter Water, Quarriers            Glenmosston Burn, Kilmacolm            Surface Water Management Plans, Greenock &amp; Port Glasgow            Integrated Catchment Study (Inverclyde) (Scottish Water Lead)            Integrated Catchment Study (Erskine) (Scottish Water Lead)</p>

**Other Schemes:**

A8 East Hamilton Street, Greenock (Transport Scotland)

- *Bouverie Burn, Port Glasgow Phase 1:* The Council's external consultant has carried out detailed hydrological studies to deal with the fluvial (river) flooding from the Bouverie Burn at Lower Bouverie Street and behind Bouverie Motors, they have designed a scheme to upsize the existing culvert in Lower Bourverie Street. The design is complete and service diversion costs are being compiled.
- *Gotter Water, Quarriers:* The Council's external consultant has carried out detailed hydrological studies to deal with fluvial (river) flooding from the Gotter Water. The studies have concluded and the outcome is that fluvial flooding is not considered to be the main concern at this location, and that pluvial (overland) flooding is the primary mechanism for flooding. The external consultant has finalised the design of a culvert to cater for these pluvial flows and divert them back into the Gotter Water. It is anticipated that site works will commence June 2019.
- *Glenmosston Burn, Kilmacolm:* The Council's external consultant has completed a detailed hydrological study and due to the site constraints and the location of the congested underground services they are experiencing difficulties finding a solution to the flooding. Officers also are currently investigating an option to attenuate the burn upstream to reduce the flow that reaches Gowkhouse Road and Market Place which may remove the need for any construction work to the existing underground pipework.
- *Integrated Catchment Study (Inverclyde):* Scottish Water is leading the ongoing catchment based study examining flooding hotspots in Inverclyde. The study will provide detailed information regarding flooding mechanisms from overland flow, sewers and watercourses; the Council is contributing £140k towards the study; the study completion was anticipated early in financial year 2018/19, however the project has fallen behind schedule and the revised completion date is now late 2019.
- *A8 East Hamilton Street, Greenock:* Officers from Inverclyde Council, Scottish Water and Transport Scotland are continuing to hold meetings to discuss the way forward to bring an early resolution to the problems at this location. As this is a Trunk Road, Transport Scotland will lead on this issue and have assessed the operation of the existing surface water drainage system to the A8 Trunk Road. As discussed with Members at the briefing on 15 November 2018 the flooding mechanisms at this location are complex and include Ladyburn, Scottish Water Sewers, Inverclyde Council's Road Drainage, Transport Scotland's Road Drainage and overland flow from private land owners. The first stage is to take the information currently being gathered from surveys and the Integrated Catchment Study to create a model to determine the cause and extent of the flooding. The next stage will be to find a cost effective workable solution. Transport Scotland has an emergency action plan in place to manage the localised flooding events until a solution is confirmed.

**5.0 IMPLICATIONS**

## 5.1 Finance:

One-off costs:

Cost Centre	Budget Heading	Budget Years	Proposed spend this report (£000s)	Virement from	Other comments
Flooding Strategy	Central Greenock Flood Prevention Scheme	2013/19	2,216		Partially funded by Scottish Government (£1.743m)

	Outwith Central Greenock Flood Prevention Schemes	2013/20	1,426		Partially funded by Scottish Government (£0.932m)
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Annually recurring costs:

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

### Legal

5.2 There are no legal implications arising from this report.

### Human Resources

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

### Equalities

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

### Repopulation

5.5 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.

## 6.0 CONSULTATIONS

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

## 7.0 LIST OF BACKGROUND PAPERS

7.1 None.