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<b>Report To:</b>	<b>Environmental &amp; Regeneration Committee</b>	<b>Date:</b>	<b>15 January 2015</b>
<b>Report By:</b>	<b>Corporate Director Environment Regeneration &amp; Resources</b>	<b>Report No:</b>	<b>ERC/ENV/IM/14.218</b>
<b>Contact Officer:</b>	<b>Ian Moffat</b>	<b>Contact No:</b>	<b>5910</b>
<b>Subject:</b>	<b>Flooding Capital Spend Update</b>		

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## 1.0 PURPOSE

- 1.1 At the Environment & Regeneration Committee on 4 September 2014 it was agreed that officers would bring forward a report to the January Committee that would ;
- Provide Members with an update on progress with the Central Greenock Flooding project.
  - Provide Members with further details and outline any additional capital requirements for flood schemes that did not qualify for support funding together with schemes that had not been brought forward previously due to access or ownership issues.
  - Provide Members with an update on the discussions officers were having with Scottish Water and to make appropriate recommendations to enter an agreement to work collaboratively on an integrated catchment study to assist resolve flooding issues throughout Inverclyde.
- 1.2 Further to the above, officers were requested to report back to Committee outlining the resources that were required to deliver the above capital programmes along with additional revenue requirements to enhance response to flooding incidents.

## 2.0 SUMMARY

- 2.1 The detailed design phase for the Central Greenock Flood Prevention Scheme is approximately 80% complete. The design and contract preparation work initially focussed on the Aberfoyle Road proposals to allow this part of the Scheme to be tendered and commence on site in February.
- 2.2 Further design work is progressing well at the remaining locations, with the results from ground investigations and survey location trial pits awaited to finalise the design. It is anticipated that the design phase will be substantially complete by the end of January. The Projected spend of each scheme is highlighted in appendix A of this report.
- 2.3 The automatic trash screen at Crescent Street has been installed and commissioned.
- 2.4 Unfortunately, an application for further funding support through the Climate Challenge Fund for the flood protection works in Kilmacolm did not get beyond the first stage due to the concentration on infrastructure works.
- 2.5 Scottish Water has requested that Inverclyde Council enter in to an agreement in principle to undertake an Integrated Catchment Study (ICS) and work collaboratively in accordance with the requirements of the Flood Risk Management (Scotland) Act 2009. The study will provide detailed information on flooding mechanisms from overland flow, sewers and watercourses. Once completed officers will bring back a report on potential future investment requirements.

- 2.6 There are two study areas that Inverclyde are involved with. The main one is the Scottish Water Inverclyde catchment covering Port Glasgow to Wemyss Bay and the secondary one is the Scottish Water Erskine catchment and our element includes Kilmacolm. The overall cost of two study areas is estimated at £973,000 and the estimated portion of cost for Inverclyde would be £90,000. The study will provide detailed information on flooding mechanisms from overland flow, sewers and watercourses. Once completed officers will bring back a report on potential future investment requirements.
- 2.7 Section 5.0 of this report provides outline details and costs for the flood schemes that did not qualify for support funding together with schemes that had not been brought forward previously due to access or ownership issues. Also included in this section is the estimated cost for the integrated catchment study agreement with Scottish Water and the additional revenue requirements to enhance the Council's ability to respond to flooding incidents.
- 2.8 Overall after deducting the balance of the remaining capital funds earmarked for additional flood schemes, this report requests that a further £950,000 investment is made for flood alleviation works.

### **3.0 RECOMMENDATIONS:**

It is recommended that the Committee:

- 3.1 Note the progress on the Central Greenock Flood Protection scheme.
- 3.2 Approve the additional flood schemes and revenue requirements listed in section 5.0 of this report and request that the Head of Environmental and Commercial Services takes forward a report to the Policy Resource Committee recommending that £950,000 for additional flood alleviation capital works and revenue requirements should be considered by Members when allocating reserves as part of the 2015 budget process.
- 3.3 Subject to approval of the above, delegate authority to the Head of Environmental and Commercial Services to progress the capital and revenue schemes listed in section 5.2, substituting them as required with schemes listed in para 5.4 of this report.
- 3.4 Subject to approval of the above, delegate authority to the Head of Environmental and Commercial Services to progress and approve the agreement in principle to work with Scottish Water on an Integrated Catchment Study.
- 3.5 Subject to the additional funding being allocated and the cost can be contained within the current service budget notes the extension of the Flood Engineers temporary contract of employment until 31 March 2018.

**Ian Moffat**

**Head of Environmental and Commercial Services**

## 4.0 BACKGROUND

- 4.1 The automated trash screen at Crescent Street is an innovative solution with Inverclyde having been successful in receiving a research grant from the Scottish Roads Research Board in conjunction with Heriot Watt University. The results from research will determine if this type of approach can successfully be rolled out to other locations across the Scottish transportation network.
- 4.2 The detailed design phase for the Central Greenock Flood Prevention Scheme is approximately 80% complete with the design and contract preparation work initially focussed on the Aberfoyle Road proposals. This has enabled a tender to be issued and allow a contract to be awarded in January. This will maintain the projected capital spend to the end of the financial year estimated as £289,000. Appendix A provides projected spend within each financial period along with dates projected costs for each scheme.
- 4.3 Further detailed design work is well advanced with site investigation works having been completed to inform the design consultant about ground conditions and utility locations at Kings Glen and Cartsburn Street respectively. Discussions are on-going with Network Rail to determine the particular construction constraints that will be required for the new culvert below the railway arch bridge in Cartsburn Street to protect the bridge.
- 4.4 The design of a solution for the flooding at West Station has identified that the extent and volume of potential surface water flow is significantly greater than originally understood. During the pre-design investigations, additional information received from SEPA demonstrated the full extent of the catchment area and sources of overland flow. The proposed solution will require being multi-faceted and detailed discussions are on-going with Transport Scotland, Scottish Water and Network Rail to consider solutions which will be of benefit to all organisations. The final cost of this scheme will be subject to a further report to this Committee.
- 4.5 An application for further funding support through the Climate Challenge Fund for the flood protection works in Kilmacolm was submitted. This application was pursued by the External Funding Officer following a suggestion of alternative funding sources from COSLA and a pre-application meeting had taken place with the Fund Manager to outline the potential project idea. However, the final application was considered to be too focused on the infrastructure relating to the flood prevention activity and not enough scope for a community led project.
- 4.6 The Council is responsible for maintaining the kerbside drains (gullies) which collect the surface water run-off from roads and footways adopted by the Council and for removing blockages in water courses that flow on Council owned land. The gully maintenance service provides key infrastructure support which assists the public in daily life and also protects and preserves Council assets. Transport Scotland is responsible for maintaining kerbside drains (gullies) on the truck road network. Organisations such as Network Rail and private property owners are responsible for removing blockages on watercourses that flow through their land.
- 4.7 Currently the Council operates one Gully vehicle, but has a number of drivers trained to operate it. Management are currently reviewing the vehicle productivity to ensure it is fully utilised and are exploring collaborative working with neighbouring authorities, gully emptying and drainage works form part of these talks.
- 4.8 In addition to the Gully emptying budget, roads services has a budget for other drainage works however with the increased severe weather events in recent years the budgets are constantly under pressure. In February 2014 the Council approved additional drainage works funding of £250,000 to spread over two years from 1 April 2014. This will be fully spent, mainly on improvements to carriageway drainage.
- 4.9 Due to a voluntary early retirement request in 2011 the Flooding Engineer's position was given up as a budget saving. This was put forward as being acceptable due to the level of capital spends and the number of outstanding projects ongoing at the time. However as a result of the detailed work required to complete the Council's bid for support grant funding and to cater for the increased investment made by the Council in flood prevention a flooding engineer has been employed on a temporary basis, this position is funded from other management savings until 31 March 2016.

## 5.0 Proposals

5.1 Future investment in flood alleviation works was outlined in the report to Committee on 4 September 2014 report no. ERC/ENV/IM/14.202. Officers were asked to report back to this Committee recommending the projects which could use the balance of the £1 million and also to advise Committee of an estimated sum to complete the projects identified.

5.2 The following schemes target resolution of business and property flooding issues and include areas flooded in the storm event at the end of October 2014:

<b>Location / Description</b>	<b>Estimated cost (£)</b>	<b>Comments</b>
Market Place and Gowkhouse Road, Kilmacolm	£358,000	<b>Replace upsize Culverts:</b> Part of the original Inverclyde Flood protection Scheme funding bid.
Lower Bouverie Street, Port Glasgow	£334,000	<b>New Automated Trash Screen and upsize of culvert:</b> Part of the original Inverclyde Flood protection Scheme funding bid.
Steel Street, Gourock	£256,000	<b>Upsize of Culvert:</b> Part of the original Inverclyde Flood protection Scheme funding bid.
Quarrier's Village (Gotter Water)	£203,000	<b>Flood embankment works and flow control structure:</b> Not previously included in funding bid because of land ownership issues
Integrated Catchment Study Agreement with Scottish Water	£90,000	Initial study costs only and officers will bring back a further report detailing any future investment requirements for joint capital schemes.
Various locations - cleaning of large diameter culverts and provide stilling ponds / tide flap valves	£125,000	Required to recover the hydraulic capacity in watercourses. Works will include the provision of stilling ponds upstream and flap valves on outlets.
Various locations - removal of road drainage from combined sewer network.	£175,000	Work in conjunction with Scottish Water to install attenuation in upstream reservoirs and removal of road drainage from combined sewer network.
Procurement or the hire of a Gulley vehicle or Vactor	£185,000	Allows for up to three years revenue funding for the hire or procurement of a specialist vehicle(s) or equipment that will significantly increase the operational flexibility whilst improving routine maintenance of gulley/drainage clearing and emergency response efforts during critical flood events.
Sub Total	£1,726,000	
Minus balance of the Councils £1m capital investment plus other unallocated capital set aside for priority Flood schemes	(£776,000)	
<b>Total</b>	<b>£950,000</b>	Total additional funding requirements to complete the above schemes = £1,726,000 minus the balance £776,000 of the remaining IC flood priority scheme capital.

5.3 The balance of funding allocated towards the resolution of flooding in Inverclyde is currently £776,000 (which includes £223,000 of previously allocated flood funding and the balance of the £1,000,000 investment, £553,000), therefore a further £950,000 funding is requested to deliver the proposed works and secure the additional resources outlined above.

#### 5.4 Reserve Projects:

In the event that officers are unable to progress any of the above schemes due to land ownership disputes etc., the following schemes listed in the table below and subject to detailed costing will act as reserves projects.

Location/Description	Estimated Cost (£)	Comments
Cumberland Road, Greenock	£200,000	Details of works being investigated following recent flooding and cost estimate includes modelling and detailed design
Coronation Park, Greenock	£105,000	De-culverting of Bouverie Burn to improve access for clearance of debris with the added benefit of increasing the amenity

5.5 In addition to the above there are a number of flood projects outwith the above, such as the West Station, Oak Mall and Trunk Road at East Hamilton Street that the design of a solution will require multi-faceted and detailed discussions with Scottish Water, Transport Scotland, Network Rail and private property owners. Officers have met several times with Scottish Water, Transport Scotland and private property owners and will bring back a report on potential joint future investment requirements for these schemes.

5.6 The Capital works identified above includes for the cleaning of large culverts, providing stilling ponds, tide flaps, however Inverclyde Council has over 10,000 gullies that require routine cleaning.

5.7 Inverclyde Council is responsible for maintaining the kerbside drains (gullies) which collect the surface water run-off from roads and footways and for removing blockages in rivers and burns, all of which may lead to flooding.

5.8 The gully maintenance service provides key infrastructure support which assists the public in daily life and also protects and preserves Council assets through:

- Reducing the dangers of standing water on the road or footway for all road users;
- Reduces the risks of structural damage to the road infrastructure by water penetration;
- Alleviating the risks of flooding and its consequences;
- Lessening the risks to all road users and pedestrians of surface water freezing in cold weather;
- Mitigates the risk of polluting natural water courses etc.

5.9 To improve the Council's resilience during severe weather events, improve operational flexibility whilst improving routine maintenance of gully/drainage clearing and emergency response efforts during critical flood events, additional resource and revenue funding of £185,000 spread over three years is required to either procure or hire specialist vehicle(s) or equipment. This will be subject to a cost option appraisal.

5.10 Scottish Water has requested that Inverclyde Council enter in to an agreement in principle to undertake an Integrated Catchment Study (ICS) and work collaboratively in accordance with the requirements of the Flood Risk Management (Scotland) Act 2009. The estimated contribution that Inverclyde Council would make to the overall case study cost of £973,000 would be £90,000. Benefits to working in partnership with Scottish Water include the development of solutions to flooding on A78, A8 and at the Oak Mall.

5.11 Collaborative working with Scottish Water on an Integrated Catchment Study will provide detailed information on flooding mechanisms from overland flow, sewers and watercourses to support the production of the Local Flood Risk Management Plan as required by the Act.

5.12 The study will serve to inform Scottish Water capital spending priorities over the coming investment period. Without an ICS, it may be very difficult to encourage Scottish Water to make any significant investment in flood prevention within Inverclyde if there is insufficient information to support potential solutions.

- 5.13 The effective delivery of the flooding works, together with meeting the requirements of the Flood Risk Management (Scotland) Act 2009 will require an early commitment to staff resources to continue beyond the end March 2016.
- 5.14 The flooding staff resource currently consists of one Supervisory Engineer with a Graduate Engineer due to start in January. This is considerably less than any other Council areas where there are significant flood prevention requirements. With such a major programme of works to deliver and broad range of statutory duties to perform it is considered essential to provide long-term job security for key members of staff with temporary contracts which are due to terminate in March 2016.
- 5.15 Early budget savings in management costs, including RAMP temporary staff budget costs have been achieved which would fund the extension of the Flooding Engineer's temporary contract until 31 March 2018.

## 6.0 IMPLICATIONS

Finance

### 6.1 Financial Implications: One off Costs

Cost Centre	Budget Heading	Budget Years	Proposed Spend this Report £000	Virement From	Other Comments
Flooding Strategy	Capital Grant	2015/16	(1,743)		Central Greenock Flooding Scheme part funded by the Scottish Government.
	Central Greenock Flood Prevention Scheme	2013/16	2,200		
		Free Reserves	2013/17 2015/18	776 950	

Annually Recurring Costs / (Savings)

Cost Centre	Budget Heading	With Effect from	Annual Net Impact £000	Virement From (If Applicable)	Other Comments
Roads	Minor Works	2015/16	(£3)		Savings to be retained in the overall budget to improve flooding maintenance work in other areas

### 6.2 Human Resources

Consideration to be given to contract arrangements for current flooding staff.

### 6.3 **Equalities**

This report has no implications for the Council's equality and diversity policies. However, any flood prevention activity will have a positive impact on the groups of people who are disproportionately affected by flooding issues. These groups include the elderly, people with disabilities, and low income families with children where there is increased reliance on public transport and local services.

### 6.4 **Repopulation**

Continued flooding on the main transport routes through Inverclyde will have a negative impact on the area's attractiveness and businesses and as such will have an adverse impact on the Council's efforts to stabilise and grow the area's population.

## 7.0 **CONSULTATIONS**

7.1 Financial Services have been consulted on this report.

7.2 The Head of Legal and Property Services have been consulted on the contents of this report.

## Appendix A

### Estimated timescales and projected costs

Location / Description	Projected Spend 2014/15 (£,000)	Projected Spend 2015/16 (£,000)	Projected Spend 2016/18 (£,000)
<b>Central Greenock Scheme (Support Funded)</b>			
Crescent Street, Greenock	80		
Kings Glen, Greenock	26	152	
Aberfoyle Road, Greenock	183		
Rankin Park, Inverkip Road, Greenock		80	
Crescent Street, Greenock		596	
Drumfrochar Road / Mearns Street, Greenock		73	
Lady Alice Pond, Inverkip Road, Greenock		80	
West Station, Newton Road, Greenock		207	
Brougham Street, Greenock		573	
Drumfrochar Road, Greenock		150	
<b>Sub Total</b>	<b>289</b>	<b>1,911</b>	
<b>Proposed additional capital schemes and revenue funding</b>			
Market Place and Gowkhouse Road, Kilmacolm			358
Lower Bouverie Street, Port Glasgow			334
Steel Street, Gourrock			256
Integrated Catchment Study with Scottish Water		90	
Quarriers Village (Gotter Water)			203
Various locations Culvert cleaning, stilling ponds and flap valves			125
Various locations Removal of road drainage from combined sewer network			175
Procurement or the hire of a Gulley vehicle or Vactor		62	123
<b>Sub Total</b>		<b>152</b>	<b>1,574</b>
<b>Total Estimated Spend</b>	<b>289</b>	<b>2,063</b>	<b>1,574</b>