



## **BATHGATE LOCAL AREA COMMITTEE**

### **BATHGATE FLOODING ISSUES**

#### **REPORT BY HEAD OF OPERATIONAL SERVICES**

#### **A. PURPOSE OF REPORT**

The purpose of this report is to inform the Local Area Committee (LAC) of the flooding experienced throughout Bathgate on the 30 December 2022 and the work being carried out to manage flood risk.

#### **B. RECOMMENDATION**

It is recommended that the LAC notes the report and actions taken to manage flood risk in Bathgate.

#### **C. SUMMARY OF IMPLICATIONS**

<b>I</b>	<b>Council Values</b>	Focusing on our customers' needs; being honest, open and accountable; making best use of our resources; working in partnership.
<b>II</b>	<b>Policy and Legal (including Strategic Environmental Assessment, Equality Issues, Health or Risk Assessment)</b>	<b>Policy</b> – (2022 – 2028) Forth Estuary Local Flood Risk Management Plan. <b>Legal</b> - The Flood Risk Management (Scotland) Act 2009.
<b>III</b>	<b>Implications for Scheme of Delegations to Officers</b>	None.
<b>IV</b>	<b>Impact on performance and performance Indicators</b>	None.
<b>V</b>	<b>Relevance to Single Outcome Agreement</b>	<b>SOA 4.</b> We live in resilient, cohesive and safe communities. <b>SOA 8.</b> We make the most efficient and effective use of resources by minimising our impact on the built and natural environment.

**VI Resources - (Financial, Staffing and Property)** **Financial:** Scottish Government's contribution to Cycle 2 (2022 – 2028) Local Flood Risk Management Plan actions is to be confirmed. The Council's contribution will be funded through the Roads Related Assets capital budget.

Bathgate Meadows Nature Park project will be funded by the Scottish Government's Water Environment Fund (WEF) administered by SEPA and through Sustrans (Scotland) 'Places for Everyone' programme, subject to their programme processes. A bid has also been made for National Lottery Heritage Fund.

**VII Consideration at PDSP** None.

**VIII Other consultations** None.

## **D. TERMS OF REPORT**

### **D.1 Background**

Officers were requested to bring a report to the LAC in response to queries raised by the Bathgate Community Council regarding flood events throughout Bathgate around 30 December, 2022.

Flooding affected many areas in West Lothian at the end of 2022, when after weeks of low temperatures and frozen ground, ice melt and rainfall led to saturated ground and high-water table. Data from the Scottish Environment Protection Agency's (SEPA) rain gauges at Slamannan and Harperigg reflect this with 70% of December's rain falling over the last week of the month. The intensity of the rainfall on the 29th December equated to 35.6mm of rain falling at the Slamannan rain gauge, this equates to 27% of December monthly rainfall. Similarly, Harperigg rain gauge experienced 36mm equating to 29% of December monthly rainfall. This level of precipitation, combined with the intensity, inevitably led to flooded surface water drains and sewers leading to the increased surface water run-off seen in Bathgate on the 29th and 30th December 2022. In spite of this, West Lothian Council did not receive any reports of internal flooding to residential or non-residential properties from this event.

### **D.2 Flood Risk Management Plans**

Under the Flood Risk Management (Scotland) Act 2009, cyclic Local Flood Risk Management Plans are produced every 6 years. 'The Plan' identifies priority areas and suitable actions to manage the flood risk to properties in these areas. Bathgate is a flood risk priority area for West Lothian Council. For more information please refer to our website: [Update on Flood Risk Management - West Lothian Council](#)

The Local Flood Risk Management Plan sets out details of who will be responsible for implementing actions, a timetable of when actions will be delivered, a description of the co-ordination requirements and funding arrangements. This is a 6-year cyclical plan with interim reports provided after 3 years.

1. By publishing the Plan, individuals and local communities are provided with information that allows them to better manage their own responsibilities. Everyone can take action with the confidence of what others are doing and with the clear knowledge of when they are undertaking these actions.

The Cycle 1 Local Plan (2016 – 2022) identified the requirement for a river flood study for the Bog Burn, Boghead Burn and Bathgate Water. This study was augmented with output from the Scottish Water Integrated Catchment study to include surface water and sewer flood risk. West Lothian Council appointed consultants (ARUP) to carry out the Bathgate Flood study which was completed in March 2022.

In Cycle 2 of the Local Plan the following actions have been identified to help reduce flood risk:  
 - Inspection and maintenance, self-help, emergency plans/response, awareness raising, planning policies, flood forecasting, sewer flood risk assessment & flood study (which has since been completed, 2022). In addition, there are activities included in the Flood Risk Management (Scotland) Act 2009 that are undertaken by each local authority across the Local Plan District (LPD). The main activities that have a significant effect and should be considered in conjunction with the plan are:

- Section 18 & 59: Work of clearance and repair. Based on an assessment of the condition of a body of water, local authorities must prepare a schedule of clearance and repair works that would substantially reduce the risk of flooding of land. Under s.59 of the Act, the local authority must carry out the works in the Section 18 Schedule if it considers that this will contribute to the implementation of actions in the Plan, but that these works will not affect the implementation of actions in this Plan.
- Section 56: A local authority may do anything which it considers will contribute to the implementation of actions in the Plan or is necessary to reduce the risk of a flood which is likely to occur imminently and have serious adverse consequences for human health, the environment, cultural heritage or economic activity in its area. This may include carrying out flood protection works, which may not be identified as actions in the Plan.

Other related statutory duties include those within the Roads Scotland Act (1984) which includes responsibilities for road drainage and water on roads.

### **D.3 Bathgate Cemetery, Glasgow Road**

On Friday 30 December 2022 during the most recent flood event, Bathgate Cemetery succumbed to flooding similar to the flooding which occurred in December 2020. This flooding was a combination of both out of bank flows from Bathgate Water but also by the accumulation of surface water runoff from higher areas of ground within the cemetery.

Unfortunately, the work adjacent to burn has taken some time to plan and initiate due to a number of factors; in part to the requirement for various licences including Scottish Environmental Protection Agency (SEPA) license (required to work close to water), and protected species surveys. The council was also been advised by our Biodiversity Officer that works should not be completed between March to September due to the sensitivity of these protected species. In addition, the Flood Team has saw unprecedented staff changes which is impacted progress.

Works are currently on site to construct the bund to help mitigate future river flooding and is due to be completed early March 2022. The purpose of the bund is to the direct flood water to a point downstream in an effort to reduce the risk.

### **Meadow Park, Bathgate**

- D.4** During the same event, Meadow Park, which is part of the floodplain for the Bathgate Water functioned as expected and was affected by river flooding.

Meadow Park is a low-lying area adjacent to a watercourse, this forms part of the floodplain. In times of spate, water is likely to spill into this area which may impact its recreational use for short periods of time until water recedes.

The Council's Cycle 2 (2022-2028) Local Flood Risk Management Plan has identified Meadow Park as an area where there may be an opportunity for natural flood management due to storage of floodwater within the floodplain of the Bathgate Water. This area is included in the design of Bathgate Meadows Nature Park project.

- D.5 Bathgate Meadows Nature Park**

Formerly Bathgate Water Regeneration project, this project aims to improve the environment of the area which the Bathgate Water runs through from Blackburn Road to Glasgow Road.

Originally planned to restore the Bog Burn, making it a functional part of the landscape and environment. It has since developed into a wider project to make the area more accessible to the local community and improving its ability to support a range of functions from helping manage surface water run off to supporting a wider variety of local wildlife. Also, creating better-quality amenity and green space, with improved pathways and walking routes.

The performance of the Boghead Burn and Bog Burn flood lagoons is also being considered to assess whether improvements can be made as part of the design.

- D.6 Roads, Sewers & Footpath Flooding**

Heavy rainfall onto already saturated ground has led to roads and footpaths being inundated with surface water run-off. Scottish Water sewer capacity can get overwhelmed quickly, meaning gullies are unable to convey surface water effectively, for example flooding at Windyknowe Park and South Mid Street, Bathgate. Both of these issues are being jointly investigated by the Council's Roads Maintenance Officers and Scottish Water.

Drainage systems have a finite capacity, during periods of intense or prolonged rainfall these systems become overwhelmed and are unable to convey water quickly – often leading to water ponding on impermeable surfaces. Scottish Water, as part of their actions within the Cycle 2 Local Flood Risk Management Plan are set to investigate this further.

An integrated Catchment Study has been undertaken by Scottish Water in an effort to better understand the complicated interactions that occur between the ground drainage systems (including natural watercourses) and manmade, below-ground drainage systems (including road drains and sewers).

## **E. CONCLUSION**

Works are currently underway on the Bathgate Cemetery and are due to be completed by March. Upon completion, this will help to mitigate the risk of flooding from the river.

Bathgate Meadows is an on-going project which seeks to improve the amenity and environmental benefits of the watercourse and catchment. West Lothian Council will keep Bathgate Community Council updated on the progress. Issues regarding water quality, flooding

and the performance of the flood lagoons will be considered as design of Bathgate Meadows Nature Park is developed. This project aims to provide benefits to the environment in the area in which all can enjoy.

Flood management will improve for the individuals, communities and businesses at risk across Bathgate and further afield through the risk-based and plan-led approach of Local Flood Risk Management Plans.

#### **F. BACKGROUND REFERENCES**

Scottish Water (2019) Bathgate Integrated Catchment Study - Catchment Flood Assessment.

Cycle 2 Local Flood Risk Management Plan for the Forth Estuary Local Plan District, published by Lead Local Authority Falkirk Council, due February 2023.

Appendices/Attachments: None

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