



## Report of the Cabinet Member for Environment Enhancement and Infrastructure Management

### Scrutiny Performance Panel 6<sup>th</sup> October 2021

#### Local Flood Risk Management

<b>Purpose</b>	To provide an update on the policy/service area
<b>Content</b>	Update on Flood Risk Management in the City and County of Swansea
<b>Councillors are being asked to</b>	Consider the report, to give their views and make recommendations to Cabinet Member as necessary
<b>Lead Councillor(s)</b>	Councillor Mark Thomas, Cabinet Member for Environment Enhancement and Infrastructure Management
<b>Lead Officer(s)</b>	Stuart Davies Head of Highways and Transportation
<b>Report Author</b>	Mike Sweeney Team Leader Highways Planned Maintenance, Drainage and Coastal Management

#### 1.0 General Description

- 1.1 The Drainage team is part of the Highways and Transportation service. It covers a wide range of services within Flood Risk Management with the main role for overseeing compliance to the Statutory Duties and National Flood and Coastal Erosion Risk Management Strategy. This report will focus on the current work which is currently ongoing to comply with the requirements to the national objectives which include;
- Reducing the consequences to individuals
  - Raising awareness of and engaging people in the response to flood and coastal erosion risk
  - Providing an effective and sustained response to flood and coastal erosion events
  - Prioritising investment in the most 'at risk' communities

1.2 To implement these objectives will be the responsibility of everyone involved in or affected by Flood and Coastal erosion risk management. From Welsh Government to the Welsh risk management Authorities in Wales, including Natural Resources Wales, Swansea Council as Lead Local Flood Authority and Welsh Water. The Authority continues to work closely with these organisations to ensure that best practice is achieved with opportunities to share information and joint funding is continuously ongoing.

## **2.0 The key activities which are ongoing include:-**

2.1 Undertaking the actions and measures as set out in the Flood Risk Management Plan. The Authority has produced the FRMP for the cycle 2015 to 2021 which outlines the actions and measures for reducing flood risk in our most at risk communities.

Work has been somewhat disrupted by Covid restrictions and the series of storm events which the Drainage team had to deal with last year when approximately 100 properties were affected by flooding.

Progress on the 89 actions and measures as identified in the FRMP is as follows.

81% of actions have been progressed with 37% of actions fully completed. 44% Partial completion with ongoing maintenance activities and current studies ongoing.

18% Outstanding to low flood risk areas will require further investigation .

The success of the actions contain within the FRMP is subject to available resource and funding which has been highlighted within the flood risk management plan.

## **2.2 Critical Culvert Assessments**

Following previous studies which assessed at the most significant critical culverts prone to high flood risk in Swansea which is part of the FRMP work. Further assessments have been carried out to two sites which had experienced flooding incidents namely Graig Y Pal Glais and Birchtree Close Sketty. This work will help inform further actions for the Authority to consider works at these sites.

## **2.3 Asset Data Collection**

The Authority will continue to undertake asset data surveys involving CCTV work, with the data held on a GIS Mapping database. The work also coincides with investigations following flood events in order to understand the cause of such flooding

## 2.4 **S19 Flood Investigation Reports**

S19 Investigation reports have been commissioned to those areas which incurred severe flooding and exceeded the Authority's thresholds of number of properties (five) affected by significant flooding where there is statutory duty placed on the Authority to deliver and publish Section 19 Flood investigation reports. The areas where S19 reports will be published for are namely:-

Lower Gorseinon  
Beryl Road Clydach

Whilst no threshold is set in statute, the Welsh Government set out in the new National Strategy for Flood and Coastal Erosion Strategy Risk Management in Wales expects Section 19 reports to be undertaken where 20 or more homes in one area experience internal flooding.

Local Authorities can choose a lower threshold and assess this in relation to each event, noting that floods affecting fewer homes can still cause considerable damage and/or loss of life.

## 2.5 **Welsh Government grant funding**

Opportunities for external funding is continually being explored. Welsh Government FCERM Grant awards have been given to the following flood affected areas which have incurred significant and repeated flooding from local sources/surface water flooding.

Brockhole Stream Blackpill - to undertake detailed design  
400 Birchgrove Road to undertake a Business Justification Case  
Llys Ddol Morryston BJC  
Capel Road Clydach BJC  
Kingrosia Park Clydach BJC  
Killay Square Killay BJC  
West Street Gorseinon BJC

Total value of grant awards – 414k

With the exception of Brockhole Stream grant funding, Welsh Government have awarded 100% grant funding to undertake BJC's to examine the flood risk in these areas and to develop a business case to provide a steer to Welsh Government with an evidence based report on potential costs on any preferred solution.

A Business Justification Case provides a steer to Welsh Government to inform them with an understanding of flood risk, and provides an assessment of options and costs for potential solutions to alleviate flooding at a particular location.

## 2.6 **Coastal Risk Management Programme**

Detailed design on flood defence walls at Mumbles is currently ongoing with the expectation that the scheme will commence construction next year. Initial consultation on the outline proposals has taken place with detail proposal requiring further consultation. The scheme will not only provide a sustainable flood defence in mumbles but will seeking to maximise multiple benefits i.e. increase tourism, green infrastructure and other benefits.

## 2.7 **Small scale works grant 21/22**

An application was made to Welsh Government to apply for small works grant to improve access and grid arrangements at 4 sites.

Gwalia Close, Gorseinon  
Waverley Park, Clydach  
Cockett Allotments, Cockett  
Moorside Road, Westcross

Works at Waverly Park Clydach and Cockett Allotments have been completed. Grids for the other two locations are in the process of being fabricated and will be fitted shortly.

In addition to these works, under the same grant the Authority had applied for monies to construct a flood bund behind properties on Llys Ael y Bryn. The works will prevent flooding to a number of properties on the Parc Brynheulog estate and will be completed by October 2021.

## 2.8 **Highway Capital Budget**

The team is responsible for works required to improve highway drainage systems for the purpose of preventing flooding to the highway and risk to road users.

With collaboration with the operational highways team works are identified to capture works which need to be undertaken to prevent flooding to the highway. In addition works are identified via complaints received from members and members of the public should flooding on the highway be reported which is over and above routine maintenance requirements.

Particular examples of works completed include ditching works, gabion works , introduction of new improved drainage systems, rodding eyes to gullies, sink holes or any other works where the condition of the drainage asset needs to be investigated for improvements. Thirty five Highways Drainage Schemes have been completed to date this year.

Good collaborative works between Welsh Water and the Authority is also being achieved. Works have recently been completed at Caswell Bay by the Authority which will reduce surface water entering Welsh Water's sewerage system. Hence this will help reduce pollution incidents to the foreshore and flooding to holiday chalets in Caswell.

## 2.9 **Reservoir Act 1975 compliance**

The team is responsible with safety measures for the two raised reservoirs we have in Swansea, namely Brynmill and Lower Swansea Valley reservoirs to ensure that in the interest of safety the reservoirs comply to the Reservoir Act 1975. There is ongoing annual works to be carried out to satisfy the recommendations of the inspection reports carried out by independent Panel Reservoirs' engineers. Design works have been completed to install a flood relief chamber in Brynmill Park and will be completed in October in order to comply with the statutory deadline for completing works by November 2021.

## 2.10 **SAB function**

Schedule 3 of the Flood and Water Management Act 2010 came into effect on 7 January 2019. It requires new developments with more than one dwelling, or a construction area of at least 100 square meters, to include Sustainable Drainage Systems (SuDS). SuDS must be designed and built in accordance with the Statutory Standards and construction must not commence until proposals are approved by the SuDS Approving Bodies (SABs). SABs are required by the legislation to adopt and maintain SuDS under certain conditions.

The SAB function is currently being carried out by 2 officers who approve drainage strategies to ensure compliance to the National Standards. The current trend that since the start of 2021 the Authority has seen a large increase in the number of applications being received from developers since the start of the year. New developments will now incorporate good suds design within their drainage strategies to ensure that the wider benefits to the environment are achieved whilst ensuring that flood risk is not increased as the result of the development.

Good collaboration with internal stakeholders through working groups has been essential in order to ensure that projects consider suds components at an early stage so that timelines and project deliveries are achieved. This is the case for many projects such as the More Home Homes Projects, Active travel schemes 21<sup>st</sup> Century Schools programme and City Centre Regen developments where SAB officers have been attending

stakeholder meetings at an early stage to ensure that submitted drainage schemes comply with National Standards. All new projects are delivering good suds systems which does not only manage the flood risk from proposed development but provide more wider benefits to improve the environment..

All developers have access to a pre-application service which offers early engagement in the smooth delivery of drainage strategies to meet the suds standards

Links between Planning and SAB process are currently being discussed to see how both processes can more closely be aligned.

## 2.11 **Operational Update – Additional Drainage teams**

2.11.1 Recent update, economic recovery funding has allowed an additional drainage and flooding response team to be set up. This will include three teams of tankers for the highway and a water course team to look after all council flood risk culverts. This will be a reactive service similar to the pothole team. - £350k this year and £600k next year. This initiative is in the process of being established.

2.11.2 Sandbags – The Authority has additional funding to assist with private flooding to deliver sandbags to flood affected properties. However, it is to be noted that there is no statutory duty to provide or distribute sandbags to residents, and unfortunately would not be able to respond quickly in an emergency to all the requests it receives. In general sandbags will only be delivered where flooding is imminent and if the council has available resources. Consequently, the delivery of sandbags should not be relied upon and the Authority will not deliver in advance of severe weather warnings unless there is a liability to do so.

2.11.3 Road Sweeping - Additional funding is provided for leaf clearance during the Autumn months over and above regular maintenance regimes, when cleansing staff will work overtime on the road sweepers where flood risk areas are targeted in accordance to priority. i.e. combination of high leaf area with known flooding issues and slip hazards. This is in addition to the regular cleansing works when clearing of leaf fall to prevent flooding in high priority areas is undertaken.

In addition to this all cleansing operatives as part of their street cleaning duties will inspect gullies and if covered in leaves or general detritus they are instructed to clean to ensure that the drain works effectively. If gullies need further work then this is reported to Highways for further investigation. This ensures good collaboration between Highways and Cleansing department.

Project teams who undertake deep cleansing works on our streets, cutting overhangs , weeds removal etc will also remove any leaf cover/detritus so far as reasonable practicable as part of their remit.

Service request are also dealt with should reports be received from either colleagues in Highways or members of the public who request for road sweeping for a particular area in order to prevent flooding.

### **3.0 Why We Do This**

3.1 There are a number of statutory requirements relating directly to this service. The main ones are:-

**Flood and Water Management Act 2010** - to assert and protect the rights of the public for the use and enjoyment of any highway

**Flood Risk Regulations 2009** - Selecting and reviewing Flood Risk Areas

**Land Drainage Act 1991** – Ordinary water course consents and permissive powers to ensure flows in watercourses are maintained

**Coastal Protection Act 1949** – To manage coastal flood and erosion risks

**Highways Act 1980** - To assert and protect the rights of the public for the use and enjoyment of any highway

**Local Flood Risk Management Strategy** – Strategy to reduce risk of flooding with Swansea

**Shoreline Management Plan 2** – Policies to manage the threat of Coastal change

**Reservoir Act 1975** – to manage then safety requirements of the two raised reservoirs under the ownership of the Authority.

3.2 Three of the five corporate priorities are particularly relevant :-

- **Safeguarding** people from harm – The Safety of the Highway
- **Transforming our economy and infrastructure** – Sustainable maintenance of the Highway and works co-ordination.
- **Transformation and future council development-** Sustainable development of the Highway

3.3 The consequences of the Council not fulfilling its statutory duties may lead to:

- Damage to property or injury to people.
- Claims for personal and property injury/loss.
- Negative impact on the health and safety and quality of life for residents
- Detrimental affect on the reputation and prosperity of Swansea

The functions and activities of the service have an impact on quality of life issues, perceptions of the city centre and the areas people live in. These have both social and economic consequences.

#### **4.0 Management and Support**

4.1 Flood risk management and SAB function is currently being delivered by 3.5FTE members of office staff in the Authority's Drainage team.

**Local Flood Risk management** is currently undertaken by 1.5 FTE.

Team leader 0.5FTE

Drainage technician 1FTE

There are 2 vacant posts, which have been advertised.

1FTE Drainage Technician

1FTE Senior Drainage Engineer

The team works closely with the Authority's Highway operational team who are responsible for operation duties. The operational team consists of two area managers, 3 supervisors, 3 gully crews. Additional crews can be called upon during times of severe weather for watercourse maintenance activities.

#### **SAB function**

2FTE are assigned to undertake the Sustainable Drainage approving body role to ensure that developments comply to Schedule 3 of the Flood and Water Management Act - Suds Legislation.

1 Senior SAB Engineer

1 SAB Engineer

#### **5.0 Stakeholders**

5.1 The main key stakeholders for flood risk management include Welsh Government, WLGA, Natural Resources Wales and Welsh Water who have a shared interest in complying with the FAWMA



2010 and the National Strategy for Flood and Coastal Erosion Risk Management in Wales and the flood affected communities in Swansea

## **6.0 Finance**

### **6.1 The Budget for Drainage staff**

Local Flood Risk Management staff is £188k  
SAB Drainage staff circa. £94k

£35k Maintenance Budget for Coastal Defences

The Authority has received FCERM grant monies to support production of Business Justification Cases and Full Business Cases in the sum £415K.

The Authority has received WG revenue grant monies in the sum of 105k for year 21/22 which will assist in flood risk management activities

Small scales works grant – The Authority has received a small works grant in the sum of 87K to undertake minor flood prevention works.

Budget provision for highways capital works has been increased by 440k this year resulting in an increase budget figure to the sum of 993k. The additional 440k was allocated to allow for an increase in drainage improvement works to prevent flooding.

## **7.0 Current Performance and Trends**

### **7.1 The service has a responsibility to deliver statutory duties expected as lead local Flood Authority. Current performance is set against external directives and standards. The target has been consistently met and include:-**

To comply with the requirements of the flood risk regulations 2009, by producing the Preliminary Flood Risk Assessment, Local Flood Risk Management Strategy and the Flood Risk Management Plan in accordance to the externally set delivery dates.

### **7.2 Planning consultations to be completed within 21 days or otherwise agreed with Planning officers. This is continually achieved.**

### **7.3 Issuing of Consents to Works on ordinary watercourse to be completed within 2 months determination period. 100% success rate.**

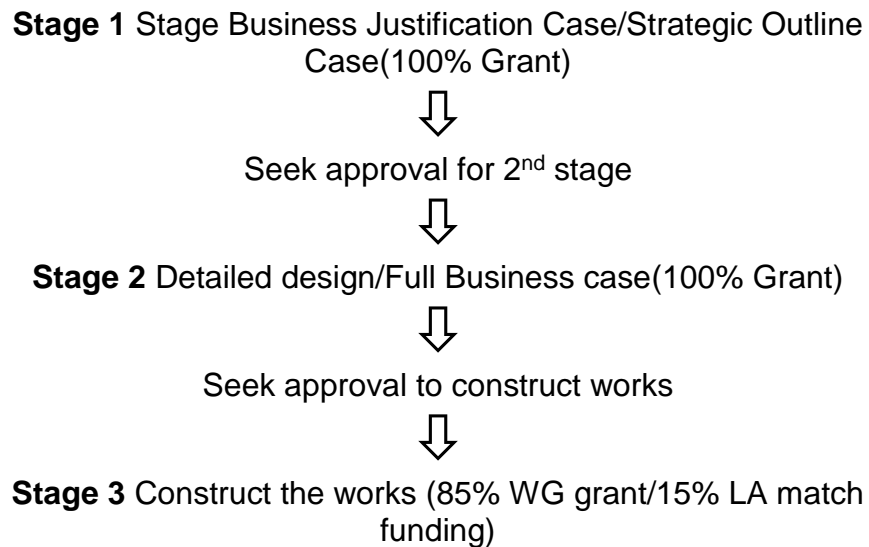
7.4 SAB applications 7-12 week determination period depending on whether an Environmental Impact Assessment is required. If so, the latter determination period applies. Current trend is that most applications are taking longer to process, and this is a National trend due to the fact that suds implementation is an evolving process and generally there are delays being met across the industry.

7.5 **FCERM Grant supported work.**

The expectation is that the above FCERM grant support schemes will be completed by March 2022.

**Grant support and key points to note**

Once successful with the grant application there are 3 stages of the grant process and gateways which will need further approval to take a scheme forward through to a construction phase.



Current trend is that once the Authority applies for grant monies to support a flood alleviation scheme, it is to be recognised that the path to construction will take a number of approval steps and will need to compete against other schemes in Wales. Whilst Welsh Government will provide 100% grant funding to support local concerns for stage one there is no guarantee that the schemes will be taken forward to the second or third stage.

**8.0 Future Challenges & Opportunities**

8.1 The main challenges for the service in relation to this report are:-

- The need to ensure long term resilience of service against a

backdrop of resource pressures

- Increasing demand and expectations from stakeholders
- Increasing challenges due to climate change.
- Opportunities for future funding will be continually explored. The expectation for future years is for Welsh Government to continue to support the Authority for flood alleviation schemes to the value of less than £100k. Welsh Government are also developing a 5 year programme for a pipeline of schemes which grant funding can be considered to support the larger flood alleviation schemes.
- The Authority will need to produce a new Local Flood Risk Management Strategy which will incorporate an action plan to manage the Local Authority's expectations for managing flood risk from local sources for another cycle of 6 years . The action plan will replace the Flood Risk Management Plan with the likelihood that the new LFRMS will need be produced by October 2023 Further guidance for Local Authority's to use will be provided in due course. It will be necessary to report on this following receipt of the new guidance.
- Future challenge for the Authority will be to secure funding to continue with the actions and measure as outlined in the Flood Risk Management Plan and the need to ensure continuity of the service against a backdrop of resource pressures
- To secure additional resource to support the SAB function as demand increases. Staff resource is dependent on incoming fees so that unit is cost neutral.

## **9.0 Risks**

**9.1** Under the Flood and Water Management Act 2010, Swansea Council became a lead Local Flood Authority (LLFA) and was given a series of new responsibilities to co-ordinate the management of local flood risk for surface water, groundwater and ordinary watercourses. Failure to fulfil this statutory duty will result in increased flood risk within the administrative boundary of Swansea Council and non-compliance to the expectations of Welsh Government.

**9.2** This may lead to increased risk to life and property and critical infrastructure with the Authority being subjected to claims and public criticism

**9.3** Shortage of Drainage Engineers is being felt across the water industry where appointments of suitable candidates for drainage roles are being found difficult to fill in across many Authorities and other sectors.

## **10.0 Assessment**

**10.1** The Authority has continued to deliver Flood Risk Management duties to ensure that compliance to the expectations of Welsh Government and statutory duties are met. The service will be delivered in accordance to best practice with continued collaboration with other Flood Risk Management Authorities to ensure that opportunities for joint working are explored through regional working groups.

**11.0 Legal Implications**

11.1 There are no legal implications associated with this report other than those set out in the body of the report.

**12.0. Financial Implications**

12.1 There are no financial implications associated with this report.

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Date: 17/09/21