



City and County of Swansea

Notice of Meeting

You are invited to attend a Meeting of the

Scrutiny Working Group - Local Flood Risk Management

At: Committee Room 5 - Guildhall, Swansea

On: Tuesday, 20 February 2018

Time: 10.00 am

Convenor: Councillor Peter K Jones

Membership:

Councillors: E W Fitzgerald, S J Gallagher, S M Jones, P Lloyd, I E Mann, C L Philpott, S Pritchard, B J Rowlands, D W W Thomas and G D Walker

Agenda

Page No.

1 Apologies for Absence

2 Disclosure of Personal and Prejudicial Interests

www.swansea.gov.uk/disclosuresofinterests

3 Outcomes from meeting held on 1 March 2017

1 - 5

- a) Convener's letter from meeting held on 1 March 2017
- b) Cabinet Member's response 29 March 2017

4 Flood Risk Management Report - Annual Update

6 - 37

*Councillor Mark Thomas – Cabinet Member for Environment Services
Stuart Davies – Head of Service, Highways and Transportation
Mike Sweeney – Principal Engineer*

5 Discussion and Conclusions

Councillors are asked to discuss conclusions arising from this session for inclusion in the Convener's letter to the Cabinet Member:

a) What do you want to say about this issue to the Cabinet Member in the Convener's letter (what are your conclusions arising from this session?)

b) Do you have any recommendations for the Cabinet Member arising from this session?

c) Are there any further issues you wish to highlight to the Scrutiny Programme Committee arising from this session?

Huw Evans

Huw Evans
Head of Democratic Services
Tuesday, 13 February 2018
Contact: Liz Jordan, Scrutiny 01792 637314



CITY AND COUNTY OF SWANSEA

Dinas A Sir Abertawe

BY EMAIL

Councillor David Hopkins
Cabinet Member for Environment &
Transportation

*Please ask for:
Gofynnwch am:*

Scrutiny

*Direct Line:
Llinell
Uniongyrochol:*

01792 637256

*e-Mail
e-Bost:*

scrutiny@swansea.gov.uk

*Date
Dyddiad:*

07 March 2017

Summary: This is a letter from the Local Flood Risk Management Scrutiny Working Group to the Cabinet Member for Environment and Transportation, following the meeting of the Working Group on 1 March 2017. It is about the Local Flood Risk Management Plan Management.

Dear Councillor Hopkins,

Local Flood Risk Management Scrutiny Working Group 1 March 2017

Thank you for attending our meeting along with Mike Sweeney to present the annual update and to answer our questions.

The Working Group heard that the City and County of Swansea as the Lead Local Flood Authority had successfully delivered the Flood Risk Management Plan for the cycle 2015 to 2021. We were pleased to hear that partnership working with Natural Resources Wales and Welsh Government was now working very well and is the best that it has ever been.

We learnt that work on the Flood Risk Management Plan has progressed to the development of a list of potential risks that have been prioritised with an associated programme of maintenance and works. We heard that the programme of work has been developed based upon conclusions made from both nationally supplied Flood Maps and local knowledge.

We were interested to hear that the flood risk in Swansea is mostly linked to ordinary small watercourses and the entry headwall to culverts and that the Authority has given priority to examining these critical watercourses in terms of the degree of flood risk and consequences of flooding should overspill occur.

We were pleased to hear that the Authority currently has a regular maintenance programme of inspecting and clearing grids on watercourses and highway culverts under council ownership. We heard that each is classified as a Red, High or Low priority location and that inspections are carried out prior to or during adverse weather conditions.

We asked how accurate the modelling produced by Natural Resources Wales was at a local level. We heard that it was not done at a local level but nationally so there are some aspects missing, for example underground water courses and issues relating to many culverts. We noted that the Authority is not involved in the production of this model and it is not exact but should be used as an indicator which is then developed and built upon using local knowledge and factors.

We were told that over the course of the six year programme the 80 issues prioritised will be looked at, some hotspots will require regular maintenance while others will need assessing for alternative options or works

We heard that there is a programme for gullies that involves cleaning/emptying gullies once every three years. We were also interested to find that a number of hotspots have been identified for more regular maintenance.

We wanted to find out more about how we inform the public and councillors about works that are on the plan and more general information about flood risk. We heard that there is a leaflet that is available on the Councils website that gives information about who to contact etc. but that it is in need of updating. You said that you will arrange for the leaflet to be reviewed, updated and made available in council public buildings as well as on the website.

We also thought it would be useful to include some more information in this leaflet about what the public can do for themselves to help protect their properties from flooding especially in areas of potential flood risk. You agreed that this would be a good idea and you would also look at getting it more widely distributed in such areas.

Recommendations

In your response we would appreciate your comments on any of the issues raised in this letter. We would however be grateful if you could specifically refer to the points and recommendations below:

1. Look at whether there is an issue to consider in relation to full underground watercourses
2. Make the prioritised programme of works list available to local ward members and the public
3. Review and update the leaflet that is available to the public on flood risk and include links to appropriate further information and advice on ways that the public can help protect their property from flooding.

Please provide your response by 29 March 2017.

Yours sincerely

Councillor Susan Jones
Convener of the Flood Risk Management Scrutiny Working Group
cllr.susan.jones@swansea.gov.uk



CITY AND COUNTY OF SWANSEA
DINAS A SIR ABERTAWE

Councillor Susan Jones
Convener of the Flood Risk
Management Scrutiny Working
Group

BY EMAIL

Please ask for:
Gofynnwch am:
Direct Line:
Llinell Uniongyrochol:

E-Mail / E-Bost:
Our Ref / Ein Cyf:
Your Ref / Eich Cyf:
Date / Dyddiad:

Councillor David Hopkins
(01792) 637439

cllr.david.hopkins@swansea.gov.uk
DH/KH

29th March 2017

To receive this information in alternative format, please contact the above.
I dderbyn yr wybodaeth hon mewn fformat arall, cysylltwch â'r person uchod.

Dear Councillor Jones

Local Flood Risk Management Scrutiny Working Group – 1st March 2017

Thank you for your letter dated 7th March 2017 regarding the views and recommendations expressed in the Local Flood Risk Management Scrutiny Working Group meeting on the 1st March 2017.

You have been advised that the City and County of Swansea, as the Lead Local Flood Authority, had successfully delivered the Flood Risk Management Plan by March 2016 for the cycle 2015 to 2021 to accord with European Floods Directive 2007/60/EC.

I am pleased to hear that you had learnt that the Flood Risk Management Plan has progressed to the development of a list of potential locations where flood risk was deemed significant enough to warrant further examination. The scope of the work was undertaken following conclusions drawn from the Flood Maps and historical information which the Authority had knowledge of from previously reported flooding incidents. You were advised that the programme for assessing prioritised sites has been developed by taking into account the level of the consequences of flooding, which in effect, looks at the risk to people, economic activity and Natural / Historical Environment affected by potential significant flood risk.

COUNCILLOR/Y CYNGHORYDD
DAVID HOPKINS
CABINET MEMBER FOR ENVIRONMENT & TRANSPORTATION /
AELOD Y CABINET YR AMGYLCHEDD A THRAFNIDIAETH

CABINET OFFICE, THE GUILDHALL, SWANSEA, SA1 4PE
SWYDDFA'R CABINET, NEUADD Y DDINAS, ABERTAWE, SA1 4PE

☎ (01792) 637439

✉ cllr.david.hopkins@swansea.gov.uk www.swansea.gov.uk



CITY AND COUNTY OF SWANSEA
DINAS A SIR ABERTAWE

Referring to the recommendations that you have made, I wish to respond by answering the points raised as they have been listed.

Look at whether there is an issue to consider in relation to full underground watercourses

I refer to the point raised in the meeting regarding the responsibility with underground watercourses and in particular to flooding issues which are reported emanating from land where there was a history of old mine workings. Unlike most other areas in South Wales, which was predominantly subjected to mining of significant Coal Measures on a much larger scale, groundwater flooding is more of a problem. In Swansea, the majority of the former coal mining areas are believed to have been fully recovered but the Authority does receive complaints regarding groundwater issues when the water table rises above the level of the ground and causes flooding. Should flooding occur close to entries to old mines i.e. adits and mine shafts, then the Authority will refer the complaint to the Coal Authority to consider taking remedial action. In the majority of cases however, where groundwater flooding occurs without any evidence of any mine entry, then the responsibility will rest with the riparian landowner to resolve. For information I have attached a link to the Coal Board website which has an interactive map that displays all of their assets in Swansea and this is used frequently when dealing with complaints of this nature.

<https://www.gov.uk/guidance/using-coal-mining-information>

Historically however, there are no records of any groundwater flooding which can be considered to have significant consequences, but there are local problems to which the Authority can offer further advice on how to solve such problems.

Make the prioritised programme of works list available to local ward members and the public.

In reply, to the group's request being made regarding the programme of the works being made available to local ward members and the public: At this stage, I would like to inform the Group that the programme was produced for the intention of informing the Working Group on how the work will progress and to show an indication on the rationale of producing the programme. In order for the programme to be successful however, it will very much be reliant on additional funding and resource being made

COUNCILLOR/Y CYNGHORYDD
DAVID HOPKINS
CABINET MEMBER FOR ENVIRONMENT & TRANSPORTATION /
AELOD Y CABINET YR AMGYLCHEDD A THRAFNIDIAETH

CABINET OFFICE, THE GUILDHALL, SWANSEA, SA1 4PE
SWYDDFA'R CABINET, NEUADD Y DDINAS, ABERTAWE, SA1 4PE

☎ (01792) 637439

✉ cllr.david.hopkins@swansea.gov.uk www.swansea.gov.uk



CITY AND COUNTY OF SWANSEA
DINAS A SIR ABERTAWE

available to procure the planned work. Consequently, although I concur with the group's recommendation, I wish to give this proposal some further deliberation until such time that the additional support has been identified.

In the meantime I have attached a link to the Flood Risk Management Plan which is published on the Authority's website.

<http://www.swansea.gov.uk/floodriskmanagementplan>

Review and update the leaflet that is available to the public on flood risk and include links to appropriate further information and advice on ways that the public can help protect their property from flooding

In reply, I wish to confirm that I concur with the Working Group and the need to review and update the existing flooding leaflet. Consequently, I wish to confirm that I will instruct the Drainage Section to produce an updated flooding leaflet and request the information to be more widely distributed.

To conclude, I wish to acknowledge and thank you for the recommendations of the Scrutiny Working Group and I hope that I have responded to the matters you have raised. Clearly, the production of the Flood Risk Management Plan will be a major challenge for the Authority, but one which we can aspire to deliver by continually seeking funding streams and working closely with all of our partners in the interest of reducing the consequences of flooding to our worst affected communities in Swansea.

.Yours sincerely

COUNCILLOR DAVID HOPKINS
CABINET MEMBER FOR ENVIRONMENT & TRANSPORTATION

COUNCILLOR/Y CYNGHORYDD
DAVID HOPKINS
CABINET MEMBER FOR ENVIRONMENT & TRANSPORTATION /
AELOD Y CABINET YR AMGYLCHEDD A THRAFNIDIAETH

CABINET OFFICE, THE GUILDHALL, SWANSEA, SA1 4PE
SWYDDFA'R CABINET, NEUADD Y DDINAS, ABERTAWE, SA1 4PE

☎ (01792) 637439

✉ cllr.david.hopkins@swansea.gov.uk www.swansea.gov.uk



**Report of the Cabinet Member for Environment Services
Local Flood Risk Management Scrutiny Working Group
20 February 2018**

**Report Title: Update on Flood Risk Management in the City
and County of Swansea**

Purpose	To provide an update on the policy/ service area
Content	Progress on the delivery of Flood Risk Management for Swansea Council
Councillors are being asked to	To consider doing further work on this issue <ul style="list-style-type: none"> • Give their views... • Consider doing further work on this issue • Make recommendations to Cabinet Member / Council
Lead Councillor(s)	Councillor Mark Thomas, Cabinet Member for Environment Services
Lead Officer(s)	Stuart Davies, Head of Service Highways and Transportation
Report Author	Mike Sweeney, Principal Engineer

1. 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.

1.3 The key activities which are ongoing include:-

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. Appendix A shows the action plan set out to the year 2021.

Progress to date has involved further investigations to the prioritised areas identified in years 16/17 and 17/18 of the plan.

The investigations have involved asset inspections to the critical watercourses which are on the Authority's Red and High risk list. The condition assessment of the flood defence asset was undertaken to categorise the asset. This has been fed into a National programme for identifying those assets which are considered significant to flood risk.

In addition to this work, the Authority has continued its investigation on five critical sites as prioritised in the plan to undertake hydrology studies to ascertain options to reduce flood risk at these locations.

The locations which have been subject to historical flooding and prioritised in the plan are:-

- 330 Birchgrove Road
- 400 Birchgrove Road
- Killay Square
- Waun Gron/Pentre Road
- Swansea Road Pontlliw

Further studies are proposed in the plan and these will continue to be undertaken subject to available funding.

Asset Data Collection – The Authority will continue to undertake asset surveys involving CCTV work, and in the last year approximately 15km of drainage assets have been surveyed 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.

- 1.4 Close working practices between operational and client staff has resulted in a number of interventions being implemented this year to critical watercourses which have included works to provide new safer access and grid arrangements to facilitate maintenance activities. This work will be ongoing but subject to available resource.
- 1.5 In terms of planning and the potential impacts of new developments, there is close and good collaborative work being undertaken between internal departments and external risk management authorities. This is to ensure that flood risk is not exacerbated as the result of new development proposals. Compliance to the requirements of Planning Policy Wales and Tan15 ensures that national guidance is adhered to. Across the 2017 financial year we were consulted by the Planning department 277 times over a range of differently sized sites. These vary from large strategic sites where 1000's of units are proposed, to small windfall sites that comprised of no more than 3 or 4 units. We have provided assessments in relation to local flood risk from all sources and the management of surface water arising from additional impermeable areas.

2. Why We Do This

- 2.1 There are a number of statutory requirements and policies relating directly to this service area. 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

2.2 Three of the five corporate priorities are particularly relevant:-.

Safeguarding people from harm

Transforming and Future Council development - Building sustainable communities

Transforming our economy and infrastructure – sustainable maintenance of council owned Drainage and Coastal assets.

2.3 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 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.

3. Management and Support

3.1 Flood risk management is delivered by 3 members of office staff in the Authority's Drainage team. 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 gulley crews. Additional crews can be called upon during times of severe weather for watercourse maintenance activities.

4. Stakeholders

4.1 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.

5. Finance

5.1 The Budget for Drainage staff is £180k to cover the costs for 3 FTEs

5.2 Drainage Capital Budget 400k circa.

5.3 £35k Maintenance Budget for Coastal Defences

5.4 The Authority has received grant monies to support Flood risk management works:

- £40k National Database to enable works to be carried out to improve access to critical watercourses
- £25k to support culvert repairs at Enid Road, Clydach
- £55k to undertake detail design for Headwall Improvement adjacent to 330 Birchgrove Road, Birchgrove
- £52k Single revenue grant which supports revenue functions

6. Current Performance and Trends

6.1 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.

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

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

6.3 Delivery of the actions and measures as outlined in the Flood Risk Management plan will be subject to available funding. Progress of the plan is shown on the attached **Appendix A**.

7. Future Challenges & Opportunities

7.1 The Introduction of SAB (Sustainable Urban Drainage

Systems Approving Body) - Consultation with LAs currently ongoing. WG is introducing new legislation into the Assembly in May 2018 which will allow local Authorities in Wales to be operational to deliver the Suds approval body SAB function and process applications.

7.2 Introduction of Land Drainage Bylaws as recommended by Welsh Government – Public consultation to commence March for 6 weeks. Byelaws have been created to enable Lead Local Flood Authorities to adopt them in order to supplement existing powers and help flood risk management functions. **See Appendix B**

7.3 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 flood alleviation schemes above the £100k threshold.

7.4 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

8. Risks

8.1 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.

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

9. Assessment

9.1 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.

Appendix A FRMP prioritisation of works programme
Appendix B Introduction New Byelaws

Background Papers:

Schedule 3 - Flood and Water Management Act 2010

https://www.legislation.gov.uk/ukpga/2010/29/pdfs/ukpga_20100029_en.pdf

Contact : Mike Sweeney

Date: 02/02/18

Appendix A

Prioritisation - Programme of Works

Ward	Priority watercourse maintenance	Ref. no.	Location	Eastings	Northings	Comments	Link/Filepath	Flood Risk Area	Estimated Costs £	Ownership	Risk To	Measures	FRMP Objective	Work Priority	Financial Year	Status
Bonymaen		Lo21	Upper Bank	266946 266961	195270 195225	Upper Bank north - historical known flooding. Works required for FRMP further investigation/study. Move to RED list for maintenance Upper Bank south - drop down headwall, headlosses etc. Check overland flowpaths. Risk to infrastructure and Copper Quarter.	..\\Grid Locations\\Priority Grid Lists - RED-HIGH-LOW\\Priority - LOW\\Ref. Lo21	Yes	5000	Parks	Residential and Highways	CCS 500: Flood Asset Inspection & CCS 400 further investigations	1,2,7,8	High	2016/17	Ongoing
Bonymaen	Maintenance responsibility PARKS		Nantong Way, Morfa	266879	195462	Parks. Low flood risk. High list. Grid compliant, on maintenance regime, continued inspection by structures CCTV Survey required	..\\Grid Locations\\Priority Grid Lists - RED-HIGH-LOW\\Parks\\Nantong Way, Morfa (off highway)	Yes	2500	Parks	Highway	CCS 400: Further investigations	1,2,7	High	2016/17	To commence in March
Clydach	N/A		Pont y Lon			Ongoing inspections by Structures every two years.		No	n/a		Non residential properties and Highway	CCS 500 - Flood Asset Inspection	1,2,7,8	High	2016/17	Ongoing
Castle	No significant intakes		Sanfields /City Centre			Urban catchment significant flooding shown of flood maps as result of run-off generated from hard landscape. Roads/Roofs etc Further work to ascertain drainage assets in City centre		Yes	20000		Residential, retail, commercial and highway	CCS 400: Further investigations & CCS 700: Contact with DCWW	1,2,5,7	low/medium	2016/17	Ongoing(part)
Cockett	Low		Cockett Allotments			Investigate culvert with CCTV survey in order to collect asset data.		Yes	2000		Residential & Highways	CCS 500: Flood Asset Inspection & CCS 600 Flood Asset Maintenance	1,4,7	High	2016/17	Ongoing, CCTV has been completed and ditch clearance
Gorseinon	N/A		Trinity Street			Flooding of highway, historical incidents		No	2000		Residential properties and highway	CCS 400 - Further investigation	1,2,7	High	2016/17	Ongoing
Kingsbridge	High	26	Libanus Road, Gorseinon – between no.17 &19	259057	198258	Historical flooding has occurred. Several properties near miss. Capacity of culvert is inadequate due to inlet control where channel banks equal to top of culvert	Priority Grid Lists - RED-HIGH-LOW\\Priority - HIGH\\Ref. 26	Yes	30000		Residential and highway	CCS 500 - Flood Asset Inspection	1,2,7,8	High	2016/17	Ongoing extensive cleansing works of culvert has been completed. Further Imps to headwall required.
Landore	Red	8	Cwm Level Road – Heol Nant Gelli	265636 265653	196080 196130	Serious flooding experienced on A4067 as the result of overspill from the Heol Nant Gelli/Quarr Road Culvert.Difficult access for maintenance/capacity of culvert needs examination. 4 residential properties, 18 commercial, main carriageway	RED-HIGH-LOW\\Priority - Red\\8. Cwm Level Road, Plasmarf	Yes	6000		Residential and Highway	CCS 500 - Flood Asset Inspection & CCS 100 - Improve flood warning service	1,2,5,6	High	2016/17	Access and grid improvements been completed. Flood warning system to be considered
Landore	N/A		Ffordd Cwm Tawe			Serious flooding experienced on A4067 as the result of overspill from the Heol Nant Gelli/Quarr Road Culvert.CCTV Works to obtain asset condition.			3000		Highway	CCS 400 - Carry out further investigation	1,2,7	Medium	2016/17	Ongoing CCTV works. Improvements to Heol Nant Gelli headwall have been completed.
Mayals	Red	1	Blackpill – s/o Woodmans	261741 261817 261824 261827 261853	190482 190486 190487 190486 190491	PAR produced, scheme sent to WG, Detailed design for flood alleviation scheme currently ongoing. WG grant funded	Priority - Red\\1. Blackpill (The Woodman)	Yes	25000	CCS	Residential/Commercial/Highway	CCS 500 - Flood Asset Inspection CCS 100 - Flood Warning Service	1,2,7,8 1,2,5,6	High	2016/17	Detailed design for public consultation in February.
Morrison	Low		Sway Road, Morrison	267242	198605	Hydrology study. CCTV Survey. Needs inspection regime to be increased to red list.Banks of watercourse failing. Housing are investigating with new culvert being suggested as solution.In development	Priority - LOW\\Sway Road, Morrison - LOW	Yes	6500		Residential & Highway	CCS 100 - Improve flood warning service CCS 300 - Derive hydrology for catchment CCS 500 - Flood Asset Inspection CCS 600 - Flood Asset Maintenance	1,2,5,6 1,2,7,8 1,2,7,8 1,4,7	High	2016/17	Improvement works to Llys Dol headwall has been completed. Further hydrology study required.

Morrison	N/A		Clydach Rd B4603			New access required for maintenance and new grid.		Yes	4500		Highway	CCS 600 - Flood Asset Maintenance	1,4,7	High	2016/17	Completed
Mawr	N/A		River Cathan			High risk - Housing asset maintenance		No	n/a	Housing	Residential	CCS 600 - Asset Maintenance	1,4,7	Low	2016/17	Ongoing maintenance and inspection
Penderry	N/A		Mynydd Newydd Road	263937 - 264000 264226	196625 - 196618 196606	Highway Drainage	Parks\Mynydd Newydd Playing Fields, Penplas	Yes	1500		Residential and Highways	CCS 600 - Flood Asset Maintenance	1,2,7	High	2016/17	Ongoing maintenance and inspection
Cockett	N/A		Carmarthen Rd, Fforsetfach			Investigate all culverts/watercourses with CCTV survey in order to collect asset data			10000		Residential & Highways	CCS 400: Further investigations	1,2,7	High	2017/18	Not started proposed
Cockett	N/A		Pontardulais Road			Investigate all culverts/watercourses with CCTV survey in order to collect asset data			10000		Residential, Commercial, Retail	CCS 400: Further investigations	1,2,7	High	2017/18	Not started proposed
Cwmbwrla	Red	6	Heol y Gors, rear of Wickes	264427 264452 264522 264626	194546 194549 194574 194641	Multiple locations in close proximity. Grid at location 3 requires attention. CCTV survey required to collect asset data. Properties at risk 1 residential Property, 11 commercial	..\Grid Locations\Priority Grid Lists - RED-HIGH-LOW\Priority - RED\6. Heol y Gors (Rear Wickes), Cwmbwrla	Yes	10000		Commercial and Highway	CCS 500 - Flood Asset Inspection and CCS 600 Asset Maintenance.	1,2,7,8	high	2017/18	New Access arrangements are currently being constructed . Grant monies to support work.
Cwmbwrla	N/A		Cwmbwrla Roundabout			Flood maps show extensive flooding in and around Cwmbwrla. The flood maps don't take into account capacity of culverts . This needs to be investigated.			10000		Residential, Commercial, Highway	CCS 400 - further investigation	1,2,7	High	2017/18	CCTV works completed
Cwmbwrla	N/A		Clare Street			Requires investigation and CCTV survey			2500		Residential and Highway	CCS 400 - further investigation	1,2,7	High	2017/18	Repairs to culvert completed. CCTV works ongoing
Gower	N/A		Llandewi			Frequent Flooding of Highway. Impassable to vehicles. Ditch maintenance regulary undertaken in this locality		No	15000		Residential properties and highway	CCS 300 Derive Hydrology for catchment, CCS 600 Flood asset maintenance	1,2,4,7,8	High	2017/18	Annual maintenance works to ditches.
Gowerton	Red	4	Bryn y Mor Road, Gowerton – Rear of Clos y Gweydd	258127 258085 258081	196492 196491 196457	Maintenance ongoing, grid replacement, flood warning service. Also culvert next to 81-95 - manhole in field behind blocks and floods, CCTV needed?	Priority - Red\4. Brynymor Road, Gowerton	No	5000		Residential and Highway	CCS 600 - Flood Asset Maintenance	1,4,7	High	2017/18	New Headwall constructed with WG supported grant
											CCS 100 - Improve Flood Warning Service	1,2,5,6	To be considered following completion of headwall imps			
Llangyfelach	N/A		A48, Pontlliw			Serious Flooding incident with 3no propertied subjected to internal flooding. Highway has been impassable.hydrology study to promote solution		Yes	10000		Residential & Highway	CCS 400 - Carry out further investigation	1,2,7	High	2017/18	Investigations have started
Llansamlet	Red	11	Birchgrove Road – No.400 / Opp.side road	270402 270393	198917 198916	PAR Report required. Need pipe inspection i.e. capacity is deficient<1in 100years protection. Catchment investigations etc to inform solutions. Historical flooding has reached media scale. 129 properties at risk	Red\11. Birchgrove Road (No. 400), Birchgrove	Yes	20000		Residential & Highway	CCS 500 - Flood Asset Inspection	1,2,7,8	High	2017/18	Study has been commissioned
Llansamlet	Red	12	Birchgrove Road – s/o No.330	270510	198614	Camera survey. New headwall structure (critical culvert project)	Red\12. Birchgrove Road (No. 330), Birchgrove		41000		Residential & Highway	CCS 500 - Flood Asset Inspection	1,2,7,8	High	2017/18	Study has been commissioned
Morrison	Red	14	DFS – r/o 32 Cwrt Llwyn Fedwyn	267342	198373	To continue maintenance on red list. To consider flood warning measures at site	Priority - Red\14. DFS, Morrison	Yes	5000		Highway	CCS 600 - Flood Asset Maintenance	1,4,7	High	2017/18	Ongoing
											CCS 100 - Improve flood warning service	1,2,5,6				
Morrison	Low	Lo3	Clydach Rd / Glyn Hirnant			Asset inspection. Possible move to high list. New grid, via internal assessment		Yes	12000		Residential & Highway	CCS 600 - Flood Asset Maintenance	1,4,7	High	2017/18	Ongoing

Morrison	N/A		Cwmbath Rd			Accumulation of SW. Inspection and investigation. Tracing/CCTV work. Possible modelling		Yes	17500		Residential & Highway	CCS 400 - Further investigation	1,2,7	High	2017/18	Not started proposed
Penyrheol	N/A		Waungron			Further investigations - hydrology study (Tuflow). Flood emanates from rural catchment. Flood Investigation solutions may arise		No	10000		Residential, Commercial and Highway	CCS 400 - Further investigation	1,2,7	High	2017/18	Study has been commissioned to determine solutions
Sketty	Red	2	Derwen Fawr Road – 150m from Mumbles Road	261864	190872	The pipe full capacity does not afford the 1 in 100 storm event which is the accepted standard of protection. Work to develop a report will be required in order to outline solutions. 5 properties at risk	Red 2	Yes	8000		Residential and Highway	CCS 500 - Flood Asset Inspection	1,2,7,8	High	2017/18	Not started proposed
Sketty	Red	3	Birch Tree Close – Down to rear of 40 Derwen Fawr Road	262021 262027 262047 262048 262051	192358 192363 192390 192420 192526	Pipe full capacity is adequate which has an annual exceedance probability greater than 1%. Frmp measure to continue maintenance. Should blockage occur 40 residential properties at risk	Red 3	Yes	Maintenance cost			CCS 600 - Flood Asset Maintenance	1,4,7		2017/18	Grid improvements have been completed. Additional work required
Sketty	High	15	Singleton Park, next to Brynmill Lane	263435	192066	New/reconfigured grid. New D/S chamber. Bank reinforcement u/s, possible regrading (Parks responsibility). Capacity of culvert has only a 1in 2year standard of protection.Consideration to upgrade will incur significant investment. Flooding to Significant infrastructure	High 15	Yes	25000	Parks	Highway	CCS 500 - Flood Asset Inspection	1,2,7,8	High	2017/18	Ongoing
Sketty	High	23	Furzeland Drive, Sketty – r/o no.21 Glan-yr-Afon Gardens	261988	192996	Grid damaged/in poor condition. Needs full replacement	..\Grid Locations\Priority Grid Lists - RED-HIGH-LOW\Priority - HIGH\Ref. 23	Yes	10000		Residential and Highway	CCS 600 - Flood Asset Maintenance	1,4,7		2017/18	Not yet started
Townhill	N/A		Gors Avenue			CCTV - 2 days. Map out culverts down to and around Cwmbwrlwa roundabout. No evidence of historical flooding. Highway and risk to railway line		Yes	2000		Highway, Railway Line	CCS 400 - Further investigation	1,2,7	High	2017/18	Not yet started
Killay South	N/A		Killay Square	260179	192880	Highway Flooding CCTV Survey completed. Hydrology study currently being undertaken.		Yes	6000		Highway and Commercial	CCS 400 - Further investigation	1,2,7	High	2017/18	Study has been commissioned due to historical flooding
Cockett	N/A		Weig Fach/Downs Close			Investigate all culverts/watercourses with CCTV survey in order to collect asset data. Some work has been carried out which needs extending		Yes	4000	Private	Residential	CCS 400: Further investigations	1,2,7	low/medium	2018/19	Completed root infestation in culvert
Clydach	Red	9	Kingrosia Park – r/o No.93 & No.97 Heol y Llwynau	270018 270133 270247 270554 270490 270407	202050 202086 202125 202339 202284 202209	Inspection and maintenance ongoing. Possible PAR with significant number of properties at risk	Priority - Red9. Kingrosia Park, Clydach	No	10000		Residential and Highway	CCS 500 - Flood Asset Inspection	1,2,7,8	High	2018/19	Maintenance Works have been completed but recommended for further hydrology study/Appraisal
												CCS 600 - Flood Asset Maintenance	1,4,7			
Clydach	Red	10	Capel Road Waverley Park – No.1 (3no.), r/o 59 Capel Road, & Mond mini rbt	269547 269565 269576 269707 269549	201787 201769 201705 201677 201414	Further investigation - Hydrology Study. Existing historical flooding, known under capacity, has been diverted previously. CCTV Survey. New Grid required and upgrading of pipe network. Initial study and design of solution is necessary to inform future costs,Properties at risk 16 approx	Priority - Red10. Waverley Park, Clydach	No	8000		Highway and Residential	CCS 400 - Further investigation	1,2,7	High	2018/19	Ongoing - CCTV has been completed
											CCS 500 - Flood Asset Inspection	1,2,7,8	CCS 600 - Flood Asset Maintenance			

Gower	N/A		A4118 Knelston to Frogmoor			Regular flooding of highway/pvt land , watercourse requires maintenance to reduce water levels		No	10000		Highways	CCS 600 - Flood Asset Maintenance	1,4,7	High	2018/19	Minor works completed. Discussion with NRW has led to watercourse clearance to lower levels
Kingsbridge			Kingsbridge Roundabout			Survey of culvert, GPS. Check against tidal levels		Yes	4000		Residential/ Commercial/ Highway	CCS 400 Carry out further investigation	1,2,7,8	High	2018/19	Not started proposed
Llansamlet	Red	13	Birchgrove Road – Bowens Arms	270813	197282	Asset condition CCTV survey. Internal review no urgent recommendations, new grid to be considered in due course. To be kept on red list. Low number of properties at risk	Red13. Birchgrove Road (Bowen's Arms). Birchgrove	Yes	2500		Residential & Highway	CCS 500 - Flood Asset Inspection	1,2,7,8	High	2018/19	Ongoing -works planned headwall imps.
Llansamlet	High	20	Clos Nant Bran, Birchgrove – r/o 313 Birchgrove Road	270485	198608	Capacity of culvert deemed satisfactory. Should blockages occur properties at risk 112	Priority - HIGHRef. 20	Yes	n/a		Residential & Highway	CCS 500 - Flood Asset Inspection	1,2,7,8	High	2018/19	Ongoing
Llansamlet	Low	Lo2	R/O 266 Birchgrove Road	270664 270671	198440 198430	General tidying required for channel entrance to headwall.	Priority - LOWRef. Lo2	Yes	2000		Residential & Highway	CCS 500 - Flood Asset Inspection	1,2,7,8	High	2018/19	Ongoing
Llansamlet	High	21	Gwernllwynchwyth Road – 3 location north of M4	269768 269774 269720	198292 198148 198178	Needs full replacement/improvements. Possible hydrology assessment. CCTV Survey to start initial investigation.	Priority - HIGHRef. 21	Yes	1000	Rugby Club	Residential & Highway	CCS 500 - Flood Asset Inspection	1,2,7,8	High	2018/19	Improvements have been completed to headwall
Mynyddbach	Red	7	Quarry Road – opp no.5	265584 265552	196086 196102	Historical flooding has occurred to contribute to flooding of A4067. Capacity issue needs further investigation including CCTV and hydrology study. 4res. Properties, 18 comm. Infrastructure	Priority - Red7.Quarry Road. Treboeth	Yes	8000		Residential & Highway	CCS 400 - Further investigations of SW	1,2,7	High	2018/19	Ongoing
Mynyddbach	N/A		Mynydd-Garnlwyd Rd			Accumulations of SW, flowing off commonland. Opposite No.8 CCTV survey		Yes	1500		Residential & Highway	CCS 400 - Further investigations of SW	1,2,7	High	2018/19	Not started proposed
Penderry	N/A		Pontarddulais Road			Culvert passes through top NW corner of Walkers Crisps site. CCTV/ Investigations.		Yes	5000		Residential and Highways	CCS 400 - Carry out further investigations	1,2,7	High	2018/19	Not started proposed
Pontardulais	N/A		St Teilo Street			Culvert in the rear gardens requires CCTV survey . Historical flooding to 2 internal properties		No	3000		Residential, Commercial and Highway	CCS 500 - Flood Asset Inspection	1,2,7,8	High	2018/19	Not started proposed
Penclawdd	N/A		Seaview			Further investigations - Map out culverts, CCTV		No	1000		Residential, Commercial and Highway	CCS 400 - Further investigations	1,2,7	High	2018/19	Not started proposed
Penclawdd	N/A		New Rd/Station Rd, Llanmorlais			Further investigations - main river interaction, local assessment of systems. Need a look at NRW R.Morlais model to see what it shows		No	5000		Residential, Commercial and Highway	CCS 400 - Further investigations	1,2,7	High	2018/19	Not started proposed
Pontardulais	N/A		Dantwyn			Capacity issues with Culvert running through Housing Estate. Catchment study required, full survey of drainage systems		No	5000		Residential, Commercial and Highway	CCS 400 - Further investigation	1,2,7	High	2018/19	Not started proposed

Penclawdd	N/A		Nant y Cedi Watercourse			Need to formalise asset maintenance, culvert survey/CCTV. Internal grid assessment		No	1500		Residential, Commercial and Highway	CCS 600 - Flood Asset Maintenance	1,4,7	High	2018/19	Not started proposed
Penderry	N/A		Pontarddulais Road			Culvert passes through top NW corner of Walkers Crisps site. CCTV/ Investigations.		Yes	5000		Residential and Highways	CCS 400 - Carry out further investigations	1,2,7	High	2018/19	Not started proposed
Sketty	N/A		King George Playing Fields/Mumbles Road/Cwm Stream			Hydrology Study to assess flow capacity of stream and to determine solutions to prevent flooding to Asheilgh Road. CCTV.		Yes	8000	Parks	Residential and Highway	CCS 400 - Further investigation	1,2,7	Med/High	2018/19	Not started proposed
Upper Loughor	N/A		Corporation Road			Further investigation - CCTV, culverts, highways networks		No	2000		Residential property/Highway	CCS 400 - Further investigation	1,2,7	High	2018/19	Not started proposed
Westcross	N/A		Bellevue Road			Hydrology Study, Grid Assessments. CCTV. Treat as one Catchment		Yes	10000		Residential and Highway	CCS 600 - Flood Asset Maintenance	1,4,7	High	2018/19	Not yet started
Westcross	N/A		Mumbles Road							CCS 400 - Further investigation		1,2,7	High	Not yet started		
Westcross	Low		Washinghouse Brook							CCS 600 - Flood Asset Maintenance		1,4,7	High	Not yet started		
Westcross	N/A		Elmgrove Road							CCS 400 - Further investigation		1,2,7	Med/High	Not yet started		
Cockett	N/A		Florestfach Industrial Estate	262458	195420	Investigate all culverts/watercourses with CCTV survey in order to collect asset data. Welsh Governemnt owned majority of site		Yes	TBC	Welsh Govt	Residential, Commercial, Industrial	CCS 400: Further investigations	1,2,7	low/medium	2019/20	Not started proposed
Gower	N/A		Port Eynon			Flooding of Highway. CCTV asset condition		No	2000		Highways	CCS 600 - Flood Asset Maintenance		Low/medium	2019/20	Not started proposed
Gowerton	N/A		Gowerton Cross			Further investigation, culverts need CCTV etc. T/M needed		No	5000		Highway	CCS 400 - Further investigation	1,2,7	High	2019/20	Not started proposed
Gowerton	N/A		Victoria Road			Culvert Assessment and appraisal.		No	5000		Commercial and Highway	CCS 400 - Further investigation	1,2,7	High	2019/20	Not started proposed
Llansamlet	High	22	Frederick Place, Llansamlet – r/o no.41 & s/o no.31	269806 269865	197365 197344	External flooding to gardens of properties	Priority - HIGH\Ref. 22	Yes	2500		Residential & Highway & Rail Line	CCS 400 - Carry out further investigation	1,2,7	Medium	2019/20	Not started proposed
Llansamlet	N/A		Parc yr Helig			Asset Inspection/Survey. Internal walkover, possible CCTV survey		Yes	1000		Residential	CCS 400 - Carry out further investigation	1,2,7	Medium	2019/20	Not started proposed
Llansamlet	Low	Lo19	Viking Way, Winch Wen	268608	196632	CCTV. Asset Inspection	Priority - LOW\Ref. Lo19	Yes	2000		Residential & Highway	CCS 500 - Flood Asset Inspection	1,2,7,8	Low	2019/20	Not started proposed
Llansamlet	N/A		Heol Dulais			CCTV. Asset Inspection/Map system.		Yes	20000		Residential & Highway	CCS 400 - Carry out further investigation	1,2,7	Low	2019/20	Not started proposed

Newton	N/A		Underhill Park			Further investigation - CCTV, culverts		No	2000		Residential and Highway	CCS 400 - Further investigation	1,2,7	High	2019/20	Not started proposed
Oystermouth	Low	Lo20	Mumbles Road			Further investigation, overland flow, block gullies (Highway maintenance)		No	10000		Residential and non residential properties, highway	CCS 400 - Further investigation	1,2,7	High	2019/20	Not started proposed
Oystermouth	N/A		Recreation Ground/Park			Further investigation, overland flow, block gullies (Highway maintenance)		No			Residential and non residential properties, highway	CCS 400 - Further investigation	1,2,7	High	2019/20	Not started proposed
Sketty	N/A		Glanyrafon/Harlech Area			CCTV. Catchment Study to assess accumulations of surface water		Yes	6000		Residential and Highway	CCS 400 - Further investigation	1,2,7	Med	2019/20	Not started proposed
Uplands	Not formalised		Glanmor Rd			Check linen plans. Check capacity of system. Formalise maintenance responsibility		Yes	5000		Residential and Highway	CCS 600 - Flood Asset Maintenance	1,4,7	High	2019/20	Not yet started
Uplands	N/A		Uplands Crescent			Map all drainage assets, CCTV, capacity check, overland flow paths		Yes	8000		Highway	CCS 400 - Further investigation	1,2,7	High	2019/20	Not yet started
Clydach	N/A		Mond Works			Flood maps show surface water flooding within works. No historical evidence that this exists.		No	n/a	Mond	private land/industrial	CCS 700 Liaison with owners of significant flood asset	1,2,5,7	Med/Low	2020/21	Not started proposed
Cwmbwrla	Low	Lo23	Manor Rd/Penfilia Rd			Flood maps shown large accumulations of surface water		Yes	2000		Residential	CCS 400 - further investigation	1,2,7	low/medium	2020/21	Not started proposed
Dunvant	N/A		Dunvant Square			Further investigation of w/c (culvert).		No	1000		Highway	CCS 400 - Further investigation	1,2,7	high	2020/21	Not started proposed
Gorseinon	N/A		High Street			Flood map showing large accumulations of surface water		No	5000		Highway	CCS 400 - Further investigation	1,2,7	Medium	2020/21	Not started proposed
Gorseinon	N/A		Land adj. Afon Lliw			Flood map showing large accumulations of surface water		No	5000		Residential properties and highway	CCS 400 - Further investigation	1,2,7	low	2020/21	Not started proposed
Llansamlet	Low	Lo14	Peniel Green Road			Low priority accumulation of surface water		Yes	1500		Residential & Highway	CCS 400 - Carry out further investigation	1,2,7	Low	2020/21	Not started proposed
Llansamlet	N/A		Trawilwn Playing Fields			Overland flow. CCTV culvert.		Yes	2000		Residential & Highway	CCS 400 - Carry out further investigation	1,2,7	Low	2020/21	Ongoing
Lower Loughor	N/A		Bwrw Rd			CCTV culvert under railway		No	1000		Residential and Highway	CCS 400 - Further investigation	1,2,7	Low	2020/21	Not started proposed
Penllergaer	High	24	Llewellyn Road, Penllergaer - s/o no.62	260808 260785	199016 199012	Asset maintenance, CCTV work	Priority - HIGH Ref. 24	No	2000		Residential, Commercial and Highway	CCS 600 - Flood Asset Maintenance	1,4,7	low/medium	2020/21	Not started proposed
Penllergaer	Low		Gwalia Close			Further investigation, (grid check, culvert CCTV, capacity check) - Hydrology study		No	5000		Residential, Commercial and Highway	CCS 400 - Further investigation	1,2,7	low	2020/21	Not started proposed
Pennard	N/A		A4118 Blackhills			Check adequacy of culvert/ watercourses crossing under A4118		No	No cost		Highway	CCS 400 - Further investigation	1,2,7	High	2020/21	Not started proposed
Penhyrheol	N/A		Frampton Road			Check adequacy of culverts/local drainage systems.		No	3000		Residential, Commercial and Highway	CCS 400 - Further investigation	1,2,7	High	2020/21	Not started proposed

Penyrheol	N/A		Coalbrook road			Check adequacy of culvert/headwall crossing under Coalbrook Road.		No	500		Highway	CCS 500 - Flood Asset Inspection	1,2,7,8	High	2020/21	Not started proposed
Pontardulais	N/A		Station Road			Floodrisk map has identified accumulations of surface water . Further investigations required		No	3000		Residential, Commercial and Highway	CCS 400 - Further investigation	1,2,7	High	2020/21	Not started proposed
Lower Loughor	N/A		Bwrw Rd			CCTV culvert under railway		No	1000		Residential and Highway	CCS 400 - Further investigation	1,2,7	Low	2020/21	Not started proposed
Upper Loughor	Low		Gwynfe Road			Further investigation - CCTV, culverts/highway networks		No	2000		Highway	CCS 400 - Further investigation	1,2,7	High	2020/21	Not started proposed
Pontardulais	N/A		Station Road			Floodrisk map has identified accumulations of surface water . Further investigations required		No	3000		Residential, Commercial and Highway	CCS 400 - Further investigation	1,2,7	High	2020/21	Not started proposed
St Thomas	N/A		Pentreguinea Rd			Low priority assessment of drainage networks/culverts		Yes	2500		Highway	CCS 400 - Further investigation	1,2,7	Low	2020/21	Not yet started
Bishopston	No significant intakes							No	n/a			Borough Wide Measures only - ongoing				
Fairwood	No significant intakes							No	n/a			Borough Wide Measures only -ongoing				
Killay North	No significant intakes							Yes	no cost		Highways	Borough Wide Measures only				

Land Drainage Byelaws Consultation 2018

This consultation is an opportunity for the public to get involved and have their say on the proposed implementation of Land Drainage Byelaws within Swansea Council. As part of the consultation process we welcome comments from our risk partners, employees of SC, members of our view point panel and members of the public and neighbouring authorities. This is your opportunity to influence how Swansea Council manages the risk of flooding from ordinary watercourses.

This consultation will run for 6 weeks from xxxx to xxxxxx.

Background

Under the Flood & Water Management Act 2010 Councils in Wales were given additional powers and responsibilities for managing flooding from surface water, groundwater and ordinary watercourses. As part of these new powers, the responsibility for consent (permission) for watercourse works passed from Natural Resources Wales (NRW) to Swansea Council in April 2012.

Since taking on this consenting duty and wider flood risk management functions, we have noted that powers under current legislation are limited and certain activities which are not currently subject to permission could potentially increase the risk of flooding especially in more built up areas.

To address the above issue Welsh Government recently approved a set of updated Land Drainage Byelaws to help Councils in Wales to better manage land drainage and flood risk management functions.

By adopting a standard set of Land Drainage byelaws it will enable consistency across the Welsh Local Authorities.

Our proposal is to adopt the standard set of Land Drainage Byelaws as approved by the Welsh Government Cabinet Secretary for Environment and Rural Affairs. Some Byelaws such as those which relate to Tidal defences/outfalls are not applicable to the Council; however they need to be

adopted as part of the standard Byelaw set. They have been removed for the purpose of this consultation.

The document lists the Byelaws we propose to implement individually, along with an explanation of the Byelaw.

The proposed Byelaw is contained within the red box, the explanation is contained in the blue box.

Definitions

Byelaws are supported by a list of standard definitions. The list of definitions is included in Appendix A, at the end of this document.

Byelaw 1: Control of the introduction of water, altering flow and volume of water

(1) Without prejudice to sections 23 and 25 of the Land Drainage Act 1991 no person shall without the consent of the authority take any action to:

- (a) stop up any watercourse; or
- (b) divert; or
- (c) impede; or
- (d) alter

the level of or direction of the flow of water in, into or out of any watercourse.

(2) In this byelaw 'alter' includes creating or extending a watercourse and introducing water which directly or indirectly increases the flow or volume of water in any watercourse within the local authority's area.

(3) In this byelaw impede includes blocking off or infilling of any watercourse channel, and obstruction of any arch of any bridge or causeway designed of, or which permits the passage of water in any watercourse or land liable to flooding.

Explanation

By implementing this Byelaw Swansea Council have to give its approval to any watercourse works which could stop up, divert, impede (block) or alter a watercourse.

Byelaw 2: Interference with sluices, flood and tidal defences

- (1)** No person shall without consent of the authority operate or interfere with any sluice, flood gate, flood or tidal defence or other water control structure or appliance or flood warning or monitoring system used for controlling, regulating or monitoring the flow of water in, into or out of an ordinary watercourse.
- (2)** In this byelaw “interfere” includes removing, damaging or disturbing materials forming part of a flood or tidal defence.
- (4)** channel, and obstruction of any arch of any bridge or causeway designed of, or which permits the passage of water in any watercourse or land liable to flooding.

Explanation

By implementing this Byelaw Swansea Council have to give its approval to any works affecting a structure controlling the flow within a watercourse.

Byelaw 3: Operation of watercourse or tidal control works

Any person having control of

- (a) any sluice or flood gate; or
- (b) any water control structure or appliance for controlling or regulating or affecting the flow of water in, into or out of a watercourse

shall use and maintain such structure or appliance in a proper state of repair and efficiency with a view to:

- (a) the prevention of flooding or of any shortage in the flow or supply of water and
- (b) the efficient working of the drainage system in the area of the (local authority/ internal drainage board)

Explanation

This byelaw requires any person owning or having control of a flow control structure to maintain it in a proper state of repair for the purpose of preventing flooding and management of the drainage network.

Byelaw 4: Maintenance of land liable to flooding and watercourse banks

(1) No person shall without the consent of the authority plant any tree, deposit or store objects or matters, light a fire or interfere with a watercourse bed or bank within the byelaw distance in such a manner as is likely to:

- (a) cause flooding,
- (b) impede the flow, or
- (c) cause or be likely to cause damage to, or
- (d) endanger the stability of, or
- (e) affect the efficiency of

a culvert, watercourse bank, watercourse control work, flood defence, tidal control work or sea defence.

(2) In this byelaw:

“interfere” includes to dredge, remove, damage or disturb materials forming part of a flood or tidal defence or of a watercourse bank or bed; and to make any excavation or do anything in, to or upon any land like to damage a watercourse bank or bed.

“light a fire” includes committing any action liable to cause any fire to be lit on any land adjoining any watercourse where such action is liable to set on fire any peat land forming the banks of the watercourse or any vegetation growing on land forming the banks of the watercourse.

“store objects or matters” includes depositing or stacking or keeping objects and solid or liquid matters including vegetation and vegetation cuttings.

“objects” include vessels.

Explanation

Where land is likely to flood, this Byelaw proposes to place a distance to restrict the activities people can do on this land. Such as; storing materials, lighting fires, planting trees.

Byelaw 5: Building of structures, pipes, etc. on land liable to flooding

(1) No person shall without the consent of the authority:

(a) erect or construct any building or structure

(i) in, on, under or over any watercourse or in or on any bank of a watercourse;

(ii) within the byelaws distance;

(iii) on any watercourse control work, flood defence, tidal control work or sea defence; or

(iv) over any part of a culvert, or within the byelaws distance on either side of it; or

(b) make or cut any excavation or any tunnel or any drain, culvert or other passage for water in, into or out of any watercourse or in or through any bank of any watercourse;

in such a manner or for such length of time as to cause damage to the watercourse bed or banks; or obstruct the flow of water in, into or out of such watercourse.

(2) This byelaw does not apply to any temporary work executed in an emergency.

(3) In this byelaw:

“Emergency” means causing immediate danger to life or property.

“objects” include vessels.

Explanation

Flooding in urban (build up areas) areas is often caused by people not being aware of watercourses/ culverts and building over/ near to them. This means that during flooding water can escape but can often not find the way back into a channel or culvert. When buildings are constructed over/ near watercourse this prevents owners maintaining them correctly. We propose to implement a distance in which the building of structures is restricted.

This byelaw also restricts works along an existing watercourse.

Byelaw 6: Repairs to buildings and structures

The person having control of any building, fence or structure in, on, under or over any watercourse, culvert, watercourse bank, flood defence works, tidal control works, tidal or sea defence shall maintain such building, fence or structure in a proper state of repair and efficiency with a view to preventing such building, fence or structure from:

- (a) impeding the flow of water in into or out of any watercourse;
- (b) damaging any watercourse bank, flood protection works, tidal control works or sea defence; or
- (c) creating danger or obstruction to the carrying out of flood defence works by the (local authority/internal drainage board)

Explanation

This byelaw requires any person owning or having control of a building, fence or structure on, under or over a watercourse/culvert to maintain it in a proper state of repair for the purpose of preventing flooding and management of the drainage network.

Byelaw 7: Vegetation – Ensuring the condition of the banks of a watercourse

The owner or occupier of any land through which any watercourse flows or on which any sea defence is situated or any adjoining land over which the local authority [/internal drainage board] needs access to get to such land shall maintain all vegetation situated within the byelaws distance and shall remove such vegetation from the watercourse or bank immediately after such cutting so that it does not impede the flow of the watercourse.

Explanation

This byelaw requires any owner or occupier of land where a watercourse is present to maintain vegetation (plant growth) situated within a fixed distance and to remove the vegetation so that flow within a watercourse is not restricted.

Byelaw 8: Damage by grazing animals

No person shall graze, keep or water any animal on any watercourse, watercourse bed or bank, flood protection work or sea defence without:

- (a) taking all such steps as are necessary to prevent the watercourse, the watercourse bed or bank, flood protection work or sea defence from being damaged by such use and
- (b) reporting to the local authority [/internal drainage board] any damage caused to the watercourse, the watercourse bed or bank, flood protection work or sea defence by the grazing, keeping or watering of animals, as soon as practicable following the occurrence of such damage.

Explanation

In rural and urban areas animals located near a watercourse can often cause erosion of the watercourse, which can lead to an increase risk in flooding due to blockages. This byelaw proposes to restrict this activity. We note there are exceptions to this, such as, animals drinking from the watercourse.

Byelaw 9: Driving of animals and vehicles

No person shall use or drive any cart or vehicle of any kind on, over or along any bank of a watercourse control work, flood protection work, tidal control work, or sea defence in such manner as to cause damage to such bank, control work, flood protection work, tidal control work, or sea defence.

Explanation

Animals and vehicles where trafficked across a watercourse or structure can cause significant cause erosion. This byelaw proposes to restrict these activities in locations to prevent damage and erosion.

Byelaw 9 - Incidental provisions – Control of animals

The owner or occupier of any land through which any watercourse flows or on which any sea defence is situated or any adjoining land over which the local authority [/internal drainage board] needs access to get to such land to carry out any work or inspection, shall ensure that, during the progress of any work or any inspection animals on such land are kept under proper control and supervision or, if such control and supervision is not possible, are not kept on such land.

Byelaw 10 - Incidental provisions – Interference with local authority [/internal drainage board]'s functions

No person shall interfere with:

- (a) access required to any land by the local authority [/internal drainage board] or of their agents to carry out their flood management functions; or
- (b) the carrying out of their functions.

Explanation

Byelaws 9 and 10 relate to the powers we possess as a land drainage authority. Sometimes we need to gain access to land for the purposes of inspecting watercourses or control structures in order to prevent/manage flooding. When we are inspecting rural land animals should be kept under proper control to protect our staff.

When the Council carry out drainage works we have certain powers. Byelaw 10 clearly explains that no person should interfere with access to land when we are carrying out our functions.

Enforcement and penalty

Failure to comply with the byelaws can lead to two proceedings:

- a. The offender may be fined and the land drainage authority can remedy the breach and recover the costs incurred.
- b. Upon conviction in relation to the breach be subject to a fine not exceeding level 5 (£5,000) and a further fine not exceeding £40 for every day on which the breach continues after conviction.

In anticipation of your involvement we wish to thank you in advance.

Appendix A

(Definitions)

The expressions “bank”, “drainage”, “drainage body”, “Internal Drainage Board”, “land”, “local authority”, “ordinary watercourse” have the same meaning as defined in the Land Drainage Act 1991.

“the Act” means the Land Drainage Act 1991

"Animal" means any animal including birds, any horse, cattle, sheep, deer, goat, swine, goose or poultry; but excluding fish and human beings;

"Byelaws distance" means any land lying landward within the following distances measuring horizontally from any watercourse bank:

- (i) if it includes a wall or embankment 8 metres from its landward extent; or
- (ii) in other cases 8 metres from the top of the watercourse bank; or
- (iii) any land lying 8 metres horizontally from the outer perimeter of a culvert measured from the widest part of the culvert.

“Building or structure” means any structure or erection, and any part of a building so defined, but does not include plant or machinery comprised in a building; It also includes a fence, post, pylon, wall, wharf, bridge, loading stage, piling, groyne, pontoon, revetment, and an engine or any mechanical contrivance; any formwork, falsework, scaffold or other structure designed or used to provide support or means of access during construction work, and any reference to a structure includes part of a structure.

“Consent of the authority” means the prior written agreement, either by email or formal documentation, of any person authorised on behalf of the Authority, and which may include any conditions/restrictions as deemed necessary by the Authority.

"Culvert" means an enclosed channel pipe or conduit for the carrying of a watercourse and any other structure forming part of a culvert including headwall, outlet and trash screen.

"Embankment" means a natural or artificial mound or other raised defence.

"Flood Defence works " means tidal, fluvial or pluvial flood defence structures and works including walls, gates, embankments or bypasses constructed or used for these purposes as well as man-made or natural sand dunes and earth retaining structures or structures constructed or used as a defence against inundation of any land by raising water levels.

"Flood warning system" means any apparatus used by the Authority for obtaining or providing information in relation to and warnings of flood.

"Land liable to flooding" means all land over which watercourse water flows in times of flood, including areas where that water is stored in times of flood.

"Nets" includes

- (a) a stake net, bag net or keep net;
- (b) any net secured by anchors and any net, or other implement for taking fish, fixed to the soil or made stationary in any other way;
- (c) any net placed or suspended in any inland or tidal waters unattended by the owner or a person duly authorised by the owner to use it for fish, and any engine, device, machine or contrivance, whether floating or otherwise, for placing or suspending such a net or maintaining it in working order or making it stationary.

"Occupier" means any tenant, licensee or other person either in occupation of any land or entitled to its occupation.

"Objects or matters" means natural or man-made liquid or solid matters or objects or materials including trees, roots of trees, branches, timber, tins, bottles, boxes, tyres, bricks, stones, soil, wire, rubbish.

"Owner" means the owner of a legal estate, and when the owner is not in immediate occupation shall include an occupier.

"Person" includes where appropriate, reference to more than one person, including a body of persons corporate or non-corporate.

"Sea defence" means any artificial or natural defence against sea water or tidal water including natural or artificial high ground (including sand dunes and cliffs) and

any works constructed or used as a defence against inundation of any land by sea or tidal waters, or for securing adequate watercourse outfalls provided it shall not include any sea defence works which are vested in or under the control of a Coast Protection Authority, a local authority or any Navigation Harbour or Conservancy Authority.

“Tidal control works” means any floodgate, lock, sluice or other structure or appliance provided or constructed for the purpose of defence against sea or tidal water.

“Vegetation” means trees, willows, shrubs, weeds, grasses, reeds, rushes or other vegetation growths;

"Vessel" means any ship, boat, or any other waterborne craft, including hovercraft and any remains of any vessel.

"Watercourse" means any river, stream, ditch, channel or other passage through which water flows including the channel of any watercourse that is for the time being dry but excluding public sewers within the meaning of the Water Industry Act 1991.

"Watercourse bank" means any bank, wall, revetment or embankment adjoining or confining any watercourse from the top to the bottom of the sloping or upright part.

"Watercourse bed" means land forming any part of a watercourse over which water normally flows.

“Water control structure” means a structure or appliance for introducing water into any watercourse and for controlling or regulating or affecting flow, and includes any sluice, slacker, floodgate, lock, weir, pump or pumping machinery;

End