| Number | Question | Action By: | Response Notes |
|--------|--|----------------------|--|
| 1 | Rainfall and Flooding Event Questions | | |
| 1.1 | How intense were the two rainfall events? | SEPA | Please refer to "Briefing Note: Scottish Environment Protection Agency - Flooding in Dingwall, 10th July and 5th August 2019". |
| 1.2 | What are the different flooding mechanisms and how do these events compare with historic flooding in Dingwall? | SEPA | Please refer to "Briefing Note: Scottish Environment Protection Agency - Flooding in Dingwall, 10th July and 5th August 2019". |
| 1.3 | Can the availability and distribution of sandbags be improved? | The Highland Council | Property owners are reminded that it is their responsibility to protect their properties from flooding and are encouraged to put measures in place, either permanent or temporary. While the Council has no duty to provide sandbags to private property owners - pallets of sand bags will continue to be made available from Roads Depots for residents to collect in the event of flooding. The depots in Dingwall are located at Craig Road and Greenhill. |
| 1.4 | Can the community receive alerts in advance of flood events? | SEPA | Yes, any individual can sign up to Floodline; either on line https://www.sepa.org.uk/environment/water/flooding/floodline/ or by phoning 0345 9881188. SEPA can provide two different types of warning messages depending on your property location. When you enter your postcode, the system will check and confirm which warning service is available for your area. If your property is within an area covered by a SEPA flood monitoring system, you will be able to sign up to receive a targeted Flood Warning message for your local area. If your property is not within a Warning area, you can sign up to receive a more general Flood Alert message for the wider geographical area, usually representing Local Authority boundaries. For Dingwall the coastal areas are within the Cromarty Firth Coastal Flood Warning Area. There is currently no Flood Warning area for the River Peffery. Flood Alerts are provided for the "Easter Ross and Great Glen" area, this provides information on the risk from river and surface water rainfall. |
| 1.5 | When people called Floodline they could not help with sandbag information - can this be improved? | SEPA | Neither Floodline (0345 9881188) nor SEPA's Customer services contact number (03000 99 66 99) are able to provide information about sandbags. Please note the section on responsibilities for flooding given on SEPA's website: https://www.sepa.org. uk/environment/water/flooding/responsibilities-for-flooding. Further information can be obtained from the Scottish Flood Forum https://scottishfloodforum.org/ and Highland Council https://www.highland.gov.uk/info/1226/emergencies/81/flooding/2 |
| 1.6 | Can someone come out to my property to investigate the cause of the flooding and provide solutions to prevent a repeat occurrence? | The Highland Council | Please contact the Flood Team on frm@highland.gov.uk or 01349868800. |
| 2 | Sewer Questions | | |
| 2.1 | When water comes out of manholes - where is it coming from? | Scottish Water | The drainage networks in Dingwall and other urban communities are interconnected. Gullies are connected either to the sewers or the surface water drains. Where they are overwhelmed by very high volumes of stormwater and there is nowhere else for the water to go, the water will unfortunately 'back up' out of drains and manholes, coming from the surface water drains and the sewers. |

| 2.2 | Is the capacity of the sewers a problem? | Scottish Water | Combined sewer systems have a design standard to be able to cope with a storm of a 1 in 30 year rate of return (or a 3% chance of occurring in any given year) based on historic weather patterns. During recent storm events both sewers and other drainage networks were unable to cope with the volume of rainwater until the storms subsided. Analysis shows that the flows experienced relatively briefly during the August weather event in Dingwall was significantly higher - and this is likely also to have been the case in the July storm. As a result, both sewers and other drainage networks were unable to cope with the storms subsided. |
|-----|---|--|---|
| 2.3 | Who is responsible for the Sewers? | Scottish Water / The Highland Council | A sewer accepts water which includes foul water. Scottish Water is responsible for the maintenance of the public sewer network, which carries foul water and/or surface drainage from households/properties. They are also responsible to maintain sewers which accept road drainage such as the case in Dingwall.A drain carries only surface water and not foul/sewerage water. The Council is responsible for the maintenance of road drainage systems including road gullies and carrier drains. |
| 2.4 | Will Scottish Water attend the next event? | Scottish Water | Yes. |
| 2.5 | Are there accurate records of the drainage system? | The Highland Council / Scottish Water | Camera surveys were undertaken after the floods in 2006 and there are good records held for most of the system with work ongoing to complete the records. Roadside gullies are mapped, however in some of the new developments there are gullies still to be uploaded to the Council's database. It has also become apparent that additional gullies have been installed in areas and not recorded. Where these have been identified they will be uploaded to the Council's database so that these gullies are included in future maintenance regimes. Scottish Water confirm that there are good records of their sewer network. |
| 2.6 | What are the contact details for Scottish Water? | Scottish Water | Scottish Water can be contacted 24 hours a day by calling 0800 077 8778, emailing help@scottishwater.co.uk, or contacting Scottish Water via its main accounts on Facebook or twitter. More information is also available at www.scottishwater.co.uk/en/In-Your-Area/Flooding-Information. Scottish Water is keen that any customers affected by sewer flooding should contact them directly so that its local team can assist where possible - and so that the cause can be investigated. It maintains a register of properties that are confirmed to have been affected by flooding caused by overloaded sewers. Scottish Water has a programme of investment to tackle flooding of this kind, which is targeted towards customers at greatest risk of being affected within their homes. |
| 2.7 | Why were Scottish Water not present during the flood event? | Scottish Water | Scottish Water had operators on site during both floods and continue to work on recovery. Scottish Water invited and attended the Emergency Liaison Group meeting on 21 August 2019 in Dingwall and will be represented at the evening Drop in Session and Public Meeting on Monday 16 September 2019 at Dingwall Academy. |
| 3 | Gully/Sewer Cleaning | | |
| | Why are the gullies not cleaned more regularly? | The Highland Council | Within existing Council resources i.e. 3 gulley cleaning vehicles for the whole of the Highland area, it is not possible to clean all the gullies annually across the entire local authority region. There are 142 days of a gulley cleaning vehicle time allocated to cover the whole of the Ross and Cromarty Area. Within these existing resources the Council tries to attend to the known problematic areas. |
| 3.2 | When were the gullies last cleaned out? | The Highland Council | The gullies were cleaned out 18 months ago on Burns Place and Gladstone Avenue gullies were cleaned in 2019. This information is recorded by the gully cleaning vehicle. |

| 3.3 | How are the connecting sewers maintained? | The Highland Council | Highland Council is responsible for its road drains from the gulley to the drain/sewer. Blockages are flushed out or if more significant, a CCTV is used to identify the problem and remedial work undertaken as appropriate. If there is a blockage at the gulley or the pipe linking it to drain/sewer this is the Council's responsibility. |
|------|--|----------------------|---|
| 3.4 | What are the Council's responsibilities for sewer cleaning? | The Highland Council | Sewers, and the cleaning and maintenance of them, are the responsibility of Scottish Water - as clarified in 2.3 above. |
| 3.5 | What are gullies design capacity? | The Highland Council | Gullies are designed with a flow capacity of a 1 in 5 year surcharge event. The drainage system is designed for a 1 in 30 year event. Standards are set out in design codes. |
| 3.6 | Are Community Services aware of all the gullies? | The Highland Council | See response to Q2.5. |
| 3.7 | If Community Services are alerted to additional gullies and drain runs how is this information captured? | The Highland Council | Following satisfactory construction and inspection gullies and drains are adopted for any new property development, and additional gullies may be put in to solve a flooding issue. These are all recorded in an asset management system (WDM). See also response to Q2.5. |
| 3.8 | Can more resources be provided to Community Services to carry out their maintenance duties? | The Highland Council | The Council is reviewing revenue budgets, and flooding issues will form part of the consideration of allocation of future budgets. |
| 3.9 | Will the aged drainage network/culvert be replaced with fit for purpose infrastructure? | The Highland Council | A surface water management plan will be undertaken coordinated with Scottish Water - and this will establish the existing capacity and also what mitigation measures may be appropriate. This will have to be considered as part of The Highland Council Capital programme, Scottish Water investment programme - or a future application for grant funding from Scottish Government. Inspections and maintenance works will continue. |
| 3.10 | Why do we have no gullies in roads in rural areas? Can our gullies be widened or redesigned to cope with flash flooding better | The Highland Council | Natural soakaway through adjacent verges is more sustainable than collecting flows in drains. Drainage systems in urban areas have historically been constructed using gullies |
| 4 | Housing Development | | |
| 4.1 | Has housing development increased the flood risk? | The Highland Council | All housing developments have been required to comply with Sustainable Drainage Systems (SUDs) standards since approximately 2001 where the post-development water run-off rate cannot exceed the pre-development rate. |
| 4.2 | What is the planning process that considers downstream flood risk from housing development? | The Highland Council | Policy 64 of the Highland wide Local Development Plan and the associated adopted Flood Risk Drainage Supplementary Guidance are applicable Highland-wide and consider downstream effects. The principle of 'no net detriment' applies – i.e. down- catchment-flows off a development site can be no worse after a development has been completed compared to flows pre-development. This is achieved by requiring developers to submit a Flood Risk Assessment and a Drainage Impact Assessment where appropriate. Such developments are required to provide SUDS treatment and attenuation to limit discharge to greenfield runoff rates. These are produced by the developer's agen and vetted by the Council's Flood Team and SEPA. Only after it has been satisfactorily demonstrated that these concerns have been addressed to the satisfaction of the Flood Team and SEPA will the applications be recommended for approval to Planning Committees for Council consideration. |

| | Who ensures that the SUDS (sustainable drainage systems) are installed correctly and maintained? | The Highland Council | Each property developer is responsible for surface water drainage of their developments; the design and installation of which are assessed through the planning and road construction consent process. When public bodies such as the Council and Scottish Water formally adopt such drainage systems including SUDS features they will verify compliance prior to adoption and will then be responsible for maintenance. If a problem occurs such as water discharging to a public road from a development, then the Council will undertake an investigation. The developer is responsible for ensuring compliant design and construction of SUDS and until adopted, the developer or an identified Factor are responsible for all maintenance. |
|-----|--|----------------------|---|
| 4.4 | Can we stop further housing? | The Highland Council | We are currently undertaking a review of the Inner Moray Firth Local Development Plan within which The Highland Council Flood Team, Scottish water and SEPA will be consulted. Through this process we would encourage individuals, community groups and interested parties to engage with the Council's Planners to raise any flooding concerns or any other planning concerns as part of this public consultation process. The planning service will be running a future drop-in session in Dingwall to review issues for the Inner Moray Firth Local Development Plan. |
| 4.5 | Is the capacity of the drainage system considered when housing planning applications are submitted? | The Highland Council | Yes, see Q 4.3 above. Flood risk issues including the capacity of drainage systems are assessed in detail during the processing of planning applications in consultation with SEPA and the Council's Flood Risk Management Team. The Council adopts and maintains SUDS features which relate to roads and Scottish Water adopt other features. Prior to adoption the developer will have to demonstrate compliance with the relevant standards. Scottish Water confirms via the planning process whether there is sufficient treatment capacity for housing development and directs developers towards the connection process which addresses potential impact on the sewer network. They only allow developers to connect additional foul flows to the sewer network once satisfied that this will not cause detriment to existing customers (by contributing to sewer flooding). Developers are often required to complete a Drainage Impact Assessment which identifies any capacity constraints in the downstream sewer network. They would then be required to carry out any necessary mitigation work to address constraints before connecting. |
| | What is done to check that planning consents for new housing development are adhered to regarding preventing flooding? | The Highland Council | In accordance with Scottish Planning Policy, planning applications which lie within flood risk areas will not be supported. Furthermore, the planning authority will ensure that approved developments do not cause an increase in flood risk to other areas through Flood Risk Assessments and Drainage Impact Assessments. See also answer to question 4.3 and 4.5 above. |
| 5 | Insurance | | |
| | What can be done to ensure insurance premiums are not excessive? | Scottish Flood Forum | Insurance Premiums are set by the Underwriters – and this will vary with each insurance company. It is important that if your premium does rise you use the Flood Re Scheme. More information on this scheme is at https://www.floodre.co.uk/ |

| 5.2 | Can you explain Flood Re and also provide contact details? | Scottish Flood Forum | Firstly, there is an insurance scheme, which started in 2016 that works in partnership with your current property insurer called Flood Re, see website at: https://www.floodre.co.uk/. This scheme is designed to make provision for Flood insurance on your property both available and affordable. The scheme runs alongside your current insurance policy and is backed by the UK Government and the Insurance Industry. The scheme works by the flood cover (liability) on your property being met by the Flood Re scheme. However please note the premium is determined by the underwriters. This means that you can still be part of Flood Re but your premium can be quite high. That's why it is important to shop around.Please noe, there are still some Insurance provider if they are part of the Flood Re scheme, but do ask your current insurance provider if they are part of the Flood Re scheme. Under the Flood Re scheme https://www.floodre.co.uk/ there are some restrictions so please check if any apply to you. A restriction that could apply to you is if your property is built after 1 Jan 2009, you would not be eligible for the Flood Re scheme as it is the builders responsibility to install appropriate flood protection / defences. Secondly, if you rent out your property – this is deemed a business and falls outside the terms of Flood Re insurance, follow the link to the Flood Re website and you will find additional information https://www.floodre.co.uk/can-flood-re-help-me/#flood_re_tool. Choose whichever company you prefer and click on the link - you will then go to the appropriate insurance website to complete an application form. Once this is done, in most cases, you will be directed to the insurance company and you may need to go through some of the questions with an 'operative'. Do not worry this is entirely normal. Scottish Flood Forum find that it can take sometimes take up to 3 attempts, before you get a positive result so be patient. Scottish Flood Forum are here to help you so if you are having difficulties please get in touch |
|-----|--|----------------------|--|
| 6 | Property Protection | | |
| | What measures can people take to protect their own property? | Scottish Flood Forum | Door barriers and Airbrick covers are key parts of protecting your property against flooding. The SFF have a booklet detailing what you can do to keep safe, however since every house / property is different I suggest you contact me for a free home and flood protection survey. SFF can be contacted on 07747702299, paul@scottishfloodforum.org |
| 7 | Boggan Burn Flooding | | |
| 7.1 | Why did Boggan Burn cause flooding | The Highland Council | The Boggan Burn screen was clear before the flooding event. A mixture of natural and artificial debris (including large pieces of plastic pipe) washed down the burn during the storm and blocked the screen at Blackwells Street causing water to back up and overtop banks. It is likely that if the debris had been restricted to natural material, over-topping of the water course not have occurred. |

| 7.2 | When did the alarms go off and what was the reaction? | The Highland Council | 1st alarm (0.5m below flooding point) - 18:32 2nd alarm (0.25m below flooding point) - 18:32 3rd alarm (flooding point reached) - 18:47 The Council attended to clear the screen at approximately 19:30. Generally there is a period of time between the first alarm and the water level rising to a level that triggers the second alarm.In the event of flash flooding the water level rises very quickly, there is little time between alarms to respond. |
|------|--|--------------------------|---|
| 7.3 | Why was there flooding in Dingwall before the alarms went off? | The Highland Council | In Dingwall, there is only a flooding alarm system on the Boggan Burn screen. Prior to the overtopping of the Boggan Burn there was surface water flooding in Dingwall as the capacity of the drainage system was exceeded. In the August event, flooding was purely surface water flooding and there were no alarms associated with this event. |
| 7.4 | Is the Boggan Burn culvert big enough? | The Highland Council | The Boggan Burn culvert has a relatively high capacity however screen blockage resulted in full flow not getting to the culvert. |
| 7.5 | What investigations are being carried out to see if works can be done at Boggan Burn? | The Highland Council | Measures on the Boggan Burn are being considered in the wider River Peffery Flood Protection Study. A review is ongoing to determine if any short or medium term interventions can be undertaken. |
| 7.6 | Could works at Boggan Burn be undertaken quickly? | The Highland Council | No funding is currently available for works within existing Highland Council resources. Funding application to Scottish Government for Flood Protection Scheme will take many years.If short/medium term interventions can be identified the Council may consider the funding of such works, but this would be through consideration at Committee. |
| 7.7 | Can measures be developed to pump water back into the Boggan Burn when flooding occurs? | Scottish Fire and Rescue | This is reviewed on a case by case basis to avoid the risk of flooding to downstream properties. |
| 7.8 | How can you ensure that works at Boggan Burn do not put others at risk from flooding, eg upstream? | The Highland Council | Potential upgrade works will require to ensure that no increase in flood risk results elsewhere. |
| 7.9 | Are you aware of an upstream sediment trap that could require maintenance? | The Highland Council | Currently, the only "sediment trap" on the Boggan Burn is the screen at Blackwells Street which is inspected monthly and cleaned out as necessary and also contains the flood trigger alarms. We are investigating the possibility of providing additional sediment traps. |
| 7.10 | Has upstream natural flood management been considered for knockbain (Boggan) Burn? | The Highland Council | Natural flood management measure are currently being investigated in consultation with Knockbain Farm. |
| 7.11 | Can Manhole covers on Boggan burn culvert be replaced with gratings that would allow overland or road flooding flow to go back into the culvert. | The Highland Council | We will consider this suggestion further to see if this would aid flood alleviation without adversely affecting others. |
| 8 | Scottish Fire and Rescue Service (SFRS) | | |
| 8.1 | What do the SFRS do during a flood event? | SFRS | SFRS will respond to 999 calls of flooding or requests from partner agencies. The Control Centre in Dundee will handle the call and mobilise the nearest SFRS appliance to the incident. Where there are multiple, simultaneous incidents, SFRS resources will respond from surrounding areas such as Invergordon, Beauly, Inverness and further afield if necessary. The responding SFRS crews will make an assessment of the incident and may request more appliances or specialist equipment where this is deemed necessary. SFRS will monitor tidal conditions and weather forecasts in order to plan ongoing resilience and response to weather events. SFRS will using pumping equipment. |

| 8.2 | How do SFRS determine the priorities? | SFRS | SFRS will prioritise incidents in terms of immediate risk to life, property and the environment. Where a call of flooding is taken, SFRS will always send and appropriate response. Where there are multiple, simultaneous incidents in a locus, the nearest Duty Manager will be informed and mobilised to coordinate the multi agency response to flooding. |
|-----|---|----------------------|---|
| 8.3 | Can the SFRS investigate possible pumping outfalls to aid future pumping operations? | SFRS | SFRS Incident command tactics are dynamic and can be adapted to meet the specific incident needs as they occur. Local SFRS crews have significant local knowledge on where likely flooding will occur and how to respond. The pumping outfall will depend on the type of flooding incident i.e Tidal/Coastal, river, Rainfall (surface) or urban drainage. |
| 9 | Future Flood Alleviation Scheme | | |
| 9.1 | Can you explain the flood alleviation strategy for Scotland and Highland? | The Highland Council | The Highland Council falls within two Local Plan Districts (LPD) Highland & Argyll LPD and Findhorn, Nairn and Speyside (LPD). For both these LPD there is a Flood Risk Management Strategy Document (produced by SEPA) and a Local Flood Risk Management Plan (produced by the lead local authority for the LPD). The strategy document sets out the short and long term ambition for flood management and states the objectives to tackling flooding in high risk areas. The Local Plan Document sets out who will meet the objectives and when each objective will be met. Copies of all documents mentioned are on the Council's website at: https://www.highland.gov.uk/info/1226/emergencies/81/flooding/3. It should be noted that Dingwall is defined as one of the 40 Potentially Vulnerable Areas (PVA) in Highland.The Local Flood Risk Management Plan identifies a prioritised action to complete a Flood Study - which is currently being progressed - with the aim of submitting details of the preferred option in December 2019. In total in Scotland there are 14 LPD again with each LPD having a strategy document and local plan document. The link to all the documents mentioned is: https://www.highland.gov.uk/info/1226/emergencies/81/flooding/3 |
| 9.2 | Why has a funding application to Scottish Government not been submitted before? | The Highland Council | 1st alarm (0.5m below flooding point) - 18:32 2nd alarm (0.25m below flooding point) - 18:32 3rd alarm (flooding point reached) - 18:47 The Council attended to clear the screen at approximately 19:30. Generally there is a period of time between the first alarm and the water level rising to a level that triggers the second alarm.In the event of flash flooding the water level rises very quickly, there is little time between alarms to respond. |
| 9.3 | Why has it taken so long from the public consultation on the flood alleviation scheme to make progress? | The Highland Council | Flood Studies require considerable work, involving consultation, surveys, environmental work, hydraulic modelling and much more as defined by SEPA to ensure consistency of SUDS studies across Scotland. |
| | When will the community be told what the proposals for the flood alleviation scheme are? | The Highland Council | It is the intention to submit details to Scottish Government in December 2019 - these details will be made available at this time. |
| 9.5 | If every local authority in Scotland is submitting applications to S.Gvtin December what are Dingwall' s chances? | The Highland Council | It is not yet known how many schemes will be put forward or how much money Scottish Government have available or the prioritisation matrix. We need to ensure that Dingwall is submitted so that it can be considered for funding. |

| 9.6 | If a submission is made to S.Gvt in December when will we find out if and when funding will be made available? | The Highland Council | Currently expected to be around summer 2020. |
|------|---|--|--|
| 9.7 | Are all local authorities doing flood studies in the same way? | The Highland Council | Yes. All other local authorities will have actions within their relevant LPD boundaries to produce flood studies, and the flood studies are to be undertaken in accordance with SEPA guidance. |
| 9.8 | What will be the assessment criteria for determining priority and funding? | The Highland Council | There will be various assessment criteria for determining funding and priority but these have yet to be established by the Scottish Government in consultation with SEPA. The key issues will be what flood reduction benefits a scheme will bring, what multiple benefits a scheme will bring, will the scheme improve public awareness and community resilience, how will a scheme adapt to future changes in flood risk, value for money, potential for co-delivering a scheme with other partners. |
| 9.9 | How can the public lobby S.Gvt regarding funding for Dingwall? | The Highland Council | Individuals and communities can raise the issue direct with their MP's, MSP's noting that the Cabinet Secretary for Environment, Climate Change and Land Reform includes the Scottish Government's responsibility for flood prevention and coastal erosion. |
| 9.10 | Will the Council consider the recent flooding in the flood study review? | The Highland Council / Scottish Water | Potential improvements on the Boggan Burn are being included in the current Flood Study.However, a lot of flooding issues experienced recently are related to surface water flooding which would be considered in a Surface Water Management Plan which is planned to be completed by 2022. As one of the key inputs to this work, Scottish Water has recently undertaken an assessment of the risk of flooding from the sewer network as required under the Flood Risk Management Act. This Is available to help inform the development of the Surface Water Management Plan in Dingwall. Scottish Water will continue to work with Highland Council in relation to this. |
| 9.11 | When will the Flood Scheme be delivered? | The Highland Council | This will be dependent on successfully obtaining grant funding and the timing of funding availability and the necessary statutory consents, however, it is not likely to be within the next 5 years unless Scottish Government increase flooding funding allocations. |
| 9.12 | Does the flood study consider all flooding mechanisms? | The Highland Council | The Flood Study is concentrating on fluvial (river) and tidal (sea) flood risk. This flood study is focussing on flooding from watercourses and the sea, rather than surface water flooding, as the consequences of flooding from watercourses and the sea are deemed to be more severe (as was experienced when the Boggan Burn over-topped). A surface water management plan which considers surface water and drainage/sewer capacities will be undertaken in Dingwall following completion of the Flood Study. |
| 9.13 | Are there plans to carry out a surface water study - management plan for Dingwall? | The Highland Council | A Surface Water Management Plan which is planned within the first cycle of the Local Flood Risk Management Plan by 2022 which will consider impacts from surface water flooding. |
| 10 | Questions raised at the Community Council Meeting of the 12th August | | |
| 10.1 | Nature of construction and dimensions of conduit and culvert from the Blackwells inlet to the discharge point of the River Peffery upstream from Peter's Bridge. | The Highland Council | The Council will be meeting with the individual who raised these questions to better understand the issues and concerns raised so that detailed information can be provided. |

| Dimensions of any variation in overall length of the conduit/culver (if known). | The Highland Council | |
|--|----------------------|--|
| Corresponding datum levels of:- (a) Invert of culvert at dishcharge point (b) Soffit of Peter's Bridge (c) Invert of culvert (Conduit) in Burn Place at a given location (e.g. opposite Police Station) (d) Ordinary Spring High tide at Peter's Bridge | The Highland Council | |
| Is there a line diagram available indicating the above datum levels etc? | The Highland Council | |