



FLOODING INCIDENTS – SOUTH UIST AND BARRA, AUGUST 2017

Report by Director of Technical Services

PURPOSE OF REPORT To update the Comhairle on the flooding incidents in South Uist and Barra on 22 August and 23 August 2017.

COMPETENCE

- 1.1 There are no financial, equalities or other constraints to the recommendation being implemented. The Comhairle is obligated under the Flood Risk Management (Scotland) Act 2009 to exercise its flood risk related functions with a view to reducing overall flood risk.

SUMMARY

- 2.1 On the evening of 22 August into the morning of 23 August 2017 there was an intense rainfall event that caused damage and flooding to property and roads in particular in South Uist and Barra. This caused some minor road flooding in South Harris and was also the cause of a significant land slide, fortunately on a minor road, without casualty.
- 2.2 During this time road users were inconvenienced by delays. However the individuals most affected were those where their houses and properties were flooded. These individuals, either by direct contact with the Comhairle, or through local Members, the MSP or the MP, are looking for guidance in the aftermath of the event.
- 2.3 Comhairle Roads Officers were on site on South Uist to deal with the road flooding incidents and on Barra shortly afterwards to start the process of assessment and repair where appropriate. Comhairle engineers have also visited the affected sites in order to gain a better perspective of the scale of events and to advise on how matters can be progressed.

RECOMMENDATION

- 3.1 **It is recommended that the Comhairle note the Report.**

Contact Officer: Calum Mackenzie, 01851 822658 and Ext 211405
Appendix: Met Office Rainfall Information 22/23 August 2017.
Background Papers: Flood Risk Management Strategy - Outer Hebrides
Local Flood Risk Management Plan - Outer Hebrides Local Plan District

BACKGROUND

- 4.1 The Comhairle, together with partner agencies SEPA and Scottish Water, has published a Local Flood Risk Management Plan for the Western Isles which sets out priorities for dealing with Potentially Vulnerable Areas (PVAs). The Plan was developed using historical data together with technical and topographical information. It is also a statutory requirement for this plan to be periodically updated with additional data or observational occurrences. At the current time there are no PVAs identified in Barra.
- 4.2 The Flood Risk Management process has been developed at a national level for the prioritisation of investment. Proposed solutions within PVAs will require participation and collaboration of not only the Flood Risk Management Partners but that of local land owners and communities. Solutions may involve innovative land use management as developed through the CoastAdapt Project and must be investigated appropriately to ensure that issues are not simply transferred to another locality i.e. providing a larger culvert at point X may solve a particular issue, however exacerbate flooding downstream at point Y. The current methodology for establishing PVAs is currently being revised and further guidance expected within the coming months.
- 4.3 From Met Office observations, included as Appendix 1 to the Report, it is clear that the rainfall experienced in the area on 22 August and 23 August 2017 was exceptional in terms of intensity. 29mm of rainfall was observed to fall over the South Uist Range between midnight and 01:00 on 23 August. Unfortunately the Met Office Radar equipment, which would have provided real time information of rainfall intensity across the Western Isles, has not been functioning for some time now and would have been particularly useful for understanding better the actual weather pattern.
- 4.4 The run-off from this event also coincided with a Spring Tide of 4.37m that morning at 07:57, which would have restricted the flow of water through tidal culverts and bridges. Due to the time of occurrence there is very little photographic evidence of the rivers and catchments at the height of the event, however there is photographic evidence of the levels that the water reached and the damage caused.

OUTCOMES

- 5.1 It is proposed that each area affected by these flooding events be further assessed in light of the information available, observations and any previous events. It is also proposed to present the current observations to the next meeting of the Outer Hebrides Local Plan District Partnership meeting in order to determine how best to represent these events in a revision of the Local Flood Risk Management Plan.
- 5.2 There is recognition that the individuals affected by property flooding are looking for advice and guidance from the Comhairle and that appropriate lines of communication will need to be established.

Met Office Communication and Rainfall Data 22/23 August 2017

E-mail dated 23 August 2017 10:03

Good morning Andy, Tom,

I hope you're both well? That was some rain that fell across Barra, the Uists and Harris last night!

Attached is a spreadsheet showing the rainfall measured in Met Office rain gauges (timings are in GMT, so add an hour on for BST), and it also shows the difference in rainfall intensity between Stornoway and South Uist & Harris. It looks like the 29.0mm measured in the hour to 0100 at South Uist Range is possibly a record hourly rainfall amount from our gauges in the Western Isles.

Please feel free to share across WIEPG partners, and let me know if you need any further information.

Cheers

Ross

Ross Melville Senior Met Office Advisor (Civil Contingencies)

Met Office Saughton House Broomhouse Drive Edinburgh EH11 3XQ United Kingdom

Rainfall Data

OVERNIGHT WESTERN ISLES RAINFALL				CURRENT RECORD SREW VALUES FOR WESTERN ISLES		
OB TIME	HARRIS: QUIDNISH	SOUTH UIST RANGE	STORNOWAY AIRPORT	OB TIME	SITE	SREW
22/08/2017 18:00	0	0.6	0	23/08/2017 00:00	South Uist	29.0mm
22/08/2017 19:00	0	3.2	0	23/07/1988 21:00	Stornoway	25.3mm
22/08/2017 20:00	4	3.2	0	30/11/1984 09:00	Benbecula	19.4mm
22/08/2017 21:00	7.4	6.4	0	04/11/1999 10:00	Skye Lusa	17.8mm
22/08/2017 22:00	7.6	4.2	0	06/08/1982 04:00	Stornoway	17.3mm
22/08/2017 23:00	2.6	8.2	0	20/07/2016 04:00	Harris Quidnish	16.8mm
23-Aug-17	5	29	0.8	02/08/2008 15:00	Stornoway	16.4mm
23/08/2017 01:00	5	9	0.2	09/12/2015 16:00	Stornoway	16.4mm
23/08/2017 02:00	5.6	1.8	1.4			
23/08/2017 03:00	11.6	3.2	0.8			
23/08/2017 04:00	5.8	0.8	0			
23/08/2017 05:00	1	1.2	0.6			
23/08/2017 06:00	1.2	1.8	2.6			
23/08/2017 07:00	1.6	3.8	1.8			
23/08/2017 08:00	0.6	0	0.4			
TOTALS	59	76.4	8.6			