

DENBIGHSHIRE COUNTY COUNCIL
FLOOD INVESTIGATION
STAKEHOLDER BRIEFING : 1

Introduction

In its role as Lead Local Flood Authority, Denbighshire County Council is undertaking an investigation into the flooding incidents that took place at a number of locations across Denbighshire on 26/27 November 2012. The investigations are being carried out under the Flood and Water Management Act 2010. In carrying out the investigations, the County Council is working in partnership with Environment Agency Wales and North and Mid Wales Trunk Roads Authority.

The purpose of the investigation is to clarify:

- Y Why the flooding happened
- Y How likely it is for that scale of flooding to happen again
- Y Whether any improvement actions are needed to ensure flood risk in the County is appropriately managed in future

A copy of the more detailed Terms of Reference is available on request.

The results of the investigation are due to be reported in May.

Conducting the Investigation

The County Council has established a Flood Investigation Working Group to carry out the investigations and compile the final report. The Working Group is chaired by Rebecca Maxwell, Corporate Director for Economic and Community Ambition and comprises officers from the Council's flooding and highways teams, Environment Agency Wales and the Trunk Roads Authority.

The County Council has also commissioned two independent experts, Professor Jean Venables and Clive Onions, to help with the investigations. Their main focus will be the flood event at Glasdir, Ruthin, for which they will conduct a full independent investigation. They will also review the findings from the investigations at the other flood locations and will validate the conclusions and recommendations. Jean and Clive were recommended to the Council by the Institute of Civil Engineers and are highly regarded in their field.

Alongside the Investigation Working Group, a group of key stakeholders has also been identified. While it will not be possible to include stakeholders directly in the investigations themselves, the Council has committed to ensuring they are informed on progress and alerted to any significant issues as they emerge. This briefing note is part of that process.

Progress to Date

The Flood Investigation Working Group has met 5 times since being established in early January. An early task has been to collate the numerous pieces of information relating to the flooding in Denbighshire on 26/27 November 2012. As well as technical information, the Working Group is also interested in receiving photographs, video footage or other eye witness information from the public. Information can be emailed to flood.investigations@denbighshire.gov.uk

The Working Group has also spent time agreeing the criteria for investigation and identifying the relevant flood locations.

Flooding was widespread in November and it would not be feasible to investigate every incident. The criteria agreed by the Working Group are as follows:

- Y One or more properties with internal flooding
- Y Impact on critical infrastructure, for example main roads or utilities infrastructure
- Y A 'near miss' of either of the above

The Working Group is also taking advice on whether flooding of significant areas of agricultural land should also be included and if so, what the trigger should be.

Having applied the agreed criteria, the Working Group has started investigations for the following flood events:

- Y Rhuddlan
- Y St. Asaph, including properties along Lower Denbigh Road
- Y Brookhouse
- Y Gellifor
- Y Llanynys
- Y Llanbedr DC
- Y Park Place / Mwrog Street, Ruthin
- Y Glasdir, Ruthin
- Y Corwen
- Y Loggerheads

An assessment is also underway on whether to also investigate flooding of agricultural land near Bodelwyddan. It is not unusual for flood locations to be identified some time after a flood event has happened. Any potential additional locations or events can be notified to the Flood Investigation Team using their e.mail address above.

The Working Group has also agreed how the investigations for locations other than Glasdir will be carried out. A 4 stage process is being adopted as follows:

- Stage 1:** Information Gathering
- Stage 2:** Public Consultation
- Stage 3:** Analysis and Recommendations
- Stage 4:** Publication

Most investigations are between Stages 1 and 2. Drop in sessions have been held in St. Asaph, Rhuddlan and Glasdir to share early findings of those investigations and seek views from affected residents. The process for public consultation at the smaller flood locations is still being determined but is likely to be on a more 1:1 basis.

Early Findings

Analysis of the rainfall pattern and weather conditions, together with the previous ground conditions around 26/27 November 2012, are suggesting that this was a more unusual flood event. River levels on 26/27 November were among the highest ever recorded and very close to those seen in 2000 when significant flooding was experienced in Ruthin. The persistent rainfall combined with the high river levels and already saturated ground conditions from other heavy rainfall leading up to 26/27 November, are pointing toward a flood risk rating of close to 1:200.

Contributory factors at each location are still being analysed but in overall terms it appears that the volume of water was more than the rivers could cope with, leading to banks being breached and flood defences being overtopped. Specific factors will apply to each location and these are currently being explored in detail to allow individual reports and recommendations to be made.

The investigations appear to have ruled out two suggested causes:

- Y Dŵr Cymru/Welsh Water has confirmed that it did not release water from Llyn Aled and Llyn Aled Isaf Reservoir
- Y River level records demonstrate that the tide was not the cause of flooding at Rhuddlan or St. Asaph

Interim Actions

It is anticipated that the investigations will take 3 months to complete. As well as investigating the causes of flooding at each location, the Working Group has also been identifying whether any interim action can be taken to mitigate flood risk.

So far, the following actions have been taken:

Glasdir:

Safety screens have been removed from either end of the 5 box culvert and a proactive maintenance check has been instigated should a flood alert be received. Installation of a temporary gauge on the culvert channel is also being explored.

Brookhouse:

Anti flood non-return valves have been instructed for the surface water drains into the main river.

Ruthin:

Anti flood non-return valves have been instructed for the Mwrog Street flood alleviation channel. Precise specifications are currently being agreed. The flood bund at Cae Ddol has been topped up at a low point. An informal flood defence at Maes Ffynnon is being surveyed to allow a full schedule of repairs to be implemented.

Next Steps

The next meeting of the Flood Investigation Working Group is scheduled for 27 February. The main focus for the meeting will be to review the findings for all flood locations, agree the public consultation process for the remaining locations and begin examination of possible solutions and recommendations. In the interim, officers will continue to collate and analyse information.

An initial meeting with Professor Jean Venables and Clive Onions will also take place this week. The purpose of this will be to share information gathered to date, understand what additional information may be required and agree how the Working Group will support the independent investigators. A meeting for Jean and Clive with Glasdir residents is also being arranged.

A further Stakeholder Briefing will be issued shortly after the next Working Group meeting on 27 February. It is hoped to be able to provide a summary of early indications of contributory factors for each location in that briefing, together with details of how the public consultation stages will be carried out.

Rebecca Maxwell
Corporate Director : Economic and Community Ambition

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