

## **ENVIRONMENT, PLANNING AND TRANSPORT COMMITTEE**

**Date:** Wednesday 13 December 2000

**Time:** 2:00 pm to 5:00 pm

**Venue:** Committee Room 2, National Assembly for Wales

### **OCTOBER / NOVEMBER FLOODS**

#### **SUMMARY OF ENVIRONMENT AGENCY INTERIM REPORT**

##### **Introduction**

1. This paper summarises an Interim Report (and Technical Annex) on the October/ November 2000 Floods, which Environment Agency Wales submitted to the Minister for Environment on 29 November.

##### **Main Conclusions of the Report**

2. Across Wales - and in particular North East Wales - the rainfall was exceptional in terms of intensity, cumulative quantity and severity. The Meteorological Office has indicated that the rainfall recorded during the autumn of 2000 across England and Wales was the highest in over 200 years of records. At Pendinas in the Afon Alyn catchment, the cumulative rainfall recorded amounted to an unprecedented 9 inches (224.9mm) over the 11 day period between 28 October and 8 November.
3. Where formal flood warning schemes existed, warnings were issued effectively and efficiently, providing the public with timely advance notice of rising river levels. In total some 146 flood warnings were issued across Wales during the period 28 October to 12 November. Of these 19 were severe flood warnings.
4. However, flood warning schemes - which incorporate the use of sophisticated technology and modelling to ultimately provide automatic warning to individuals - are in place only for those catchments or river stretches which flood regularly. For all other areas, the only warning is the more general Floodwatch.

5. The extent of flooding across Wales varied with local weather conditions. For example, in South West Wales, despite the prolonged rainfall, the river network was able largely to deal with the resultant flood flows with limited flooding of property. In North Wales, however, the impact was very much greater, with some of the river levels achieved being the highest on record. Across Wales approximately 1500 properties have been currently identified as having been flooded. Road and rail communications were cut and farming was severely disrupted. Those people directly affected, particularly the elderly, suffered great distress. Mercifully no one died in Wales as a direct consequence of the flooding.
6. The overall picture is of a concentration of flooding and disruption in parts of North East Wales, with large numbers of properties severely flooded and many people forced out of their homes. In North Wales over 1000 properties were flooded. There were 64 properties flooded in South West Wales, 325 in South East Wales and 130 in Mid Wales. There were also specific sites where extensive and unexpected flooding occurred, notably at Mold, Ruthin, Rhydymwyn, Almere, Trevalyn and Rhyl (all in North Wales) and at Newport and across the Vale of Glamorgan in South Wales. Some 746 properties were flooded at these locations alone. In the remainder of Wales there have been many localised flooding incidents where water entered properties. Many of those incidents resulted from surface water, blocked drains and overloaded sewers.
7. Our defences were tested by the event in many locations and proved effective in protecting property against the high flows experienced. Without these defences many hundreds of properties would have been flooded. At Bangor on Dee, despite the prolonged high river levels experienced and fears that the defences might fail - which led to evacuation orders being issued - the defences survived and protected some 450 properties against flooding. There were, however, locations such as Rhydymwyn, Mold and Rossett on the River Alyn catchment where defences were overwhelmed.
8. Public agencies responded to the event by warning of potential flooding, by managing flood defences and other essential infrastructure systems and, in certain areas, by rescuing, evacuating and providing temporary accommodation for those displaced by the floods. The ability of those bodies to respond to such an event was severely tested during the incident, as were their systems, procedures and resourcing levels.
9. 257 people had to be evacuated from their homes in North Wales, excluding precautionary evacuation at Bangor on Dee. Only one person needed temporary accommodation in the remainder of Wales.
10. An initial assessment, undertaken by the Agency solely for its own area of responsibility, indicates that the cost of providing both new flood defences and improved levels of service is likely to be £8.5 million.
11. The estimated cost of emergency repair works to be undertaken by the Agency to restore the pre-flood level of service is £850k. The Local Authority costs in dealing with the emergency will be significantly greater than those incurred by the Agency. They too will need to review the standards of their own defences and identify the cost of improving those where deemed necessary.
12. In the aftermath of the flooding, the Agency has taken appropriate and immediate action.

It intends to:

- undertake a programme of urgent repairs to restore flood defences to original standards;
- investigate the performance of flood alleviation schemes close to 'overtopping' during this event, as a matter of priority;
- assess all aspects of the flooding, in collaboration with other responsible organisations, and establish what improvements can be made to flood defences and drainage infrastructure;
- review the emergency response to see what lessons can be learned from the event and what could be improved;
- review existing flood warning arrangements with others with relevant responsibilities to ensure that the significant thresholds of flooding are incorporated into existing procedures either as confirmation or improvement to existing information;
- examine the current coverage of flood warning schemes across Wales to ascertain whether extensions can be developed for areas not currently covered; and
- review the hydrometric improvements currently in place to see whether further installations are required.