

Damage could reach \$250,000

WODEN VALLEY REPORT

The report of the Woden Valley flood of January 26, tabled in the House of Representatives yesterday by the Minister for the Interior, Mr Hunt, said it had caused damage which could total almost \$250,000.

The report from the Department of the Interior said it was indicated that marked thunderstorm activity began on January 26 at about 6.30 pm at Burra, some 14 miles south-south-east of the Woden Valley. Heavy rain, an estimated 440 points recorded in one hour, was reported from two stations in the area. Heavy falls of small (marble-size) hail were associated with the rain. The area of activity extended north-westward during the period 7 pm to 7.30 pm to enter the Woden Valley soon after.

It was possible that on an area of thunderstorm activity could explain the storm in Canberra and the south to south-east sector from 6.30 pm to 9 pm.

Assuming that the first major storm cells developed near Burra just before 8.30 pm it could be postulated that a cold air outflow could have induced new cells to develop to the north-west.

Once in the Woden Valley intense activity seemed to have been favoured and two cells formed side by side and remained stationary for about an hour.

It appeared that the

worm to the north-west over the Mount Stromlo area. The cell further to the east appeared to have propagated slowly north-eastward and dissipated.

Two reports of tornado sightings in an area near Mount Rob Roy, well south of the Woden Valley, had also been received.

A detailed study of the storm features was continuing.

The latest estimates produced by the Bureau of Meteorology indicated that the average return period of a fall of 135 points or more in one hour at Canberra was 50 years while a 4 in fall in 24 hours had a return period of about 40 years, the report said.

More than forecast

Although storms similar to the one which affected the Woden Valley were not unusual over south-eastern Australia (several hundred thousand square miles in area), the probability of such a storm occurring over a particular catchment of the order of one square mile was extremely remote.

The intensity of and duration of rainfall in the most severe areas of the storm exceeded the once-in-100 years rainfall predicted for Canberra from data published by the Institution of Engineers (Australia) and over one square mile of area

was probably in the order of a once-in-500 years rainfall.

"The peak of the flood entered the Molonglo River from Yarralumla Creek at the rate of 10,000 cubic feet of water per second which can be classified with confidence as an extremely rare flood for an area as small as the Woden Valley. As a

comparison, the Cotter River, which has a catchment area of approximately 13 times that of the Woden Valley and an average annual rainfall some 50 per cent greater than Canberra, has only recorded three floods in a 60-year period of record, that equal or exceed the Woden Valley flood of January 26, 1971", the report said.

Instruments in the valley had recorded floods after January 26 which were a result of the same weather pattern, most significantly on February 5 and 10.

Both flooded the Yamba Drive - Yarra Glen - Melrose Drive intersection, but contrasted sharply with the major flood, in that in each case some five hours elapsed from the beginning of the rain to the peak of the intersection flood, whereas the flood of January 26 from the beginning of rain to the peak at the intersection was less than an hour and probably 45 to 50 minutes.

Eye-witness accounts indicated that from the beginning of overtopping of the crossing to the peak of

the flood on January 26 was only about 15 minutes.

Seven people lost their lives and at least six or seven vehicles were abandoned and later recovered, the report said.

Motorists in difficulty

Apart from the areas where the tragedies occurred, car drivers and passengers experienced difficulties in Beasley Street, Farrer, near Lambrigg Street; in Melrose Drive, Torrens, near Beasley Street where people were known to have been rescued from vehicles;

Mount Taylor cell could not propagate northwards because of a cold outflow generated by a smaller storm to the north-west over the Mount Stromlo area.

been rescued from vehicles; in Melrose Drive, Pearce, near Hodgson Crescent; at points in Hindmarsh Drive, Phillip, between Melrose Drive and Yamba Drive; in Yarra Glen as far north as the Carruthers Street overpass; at the Cotter Road crossing of Yarralumla Creek where one person was rescued; at the junction of Beasley Street and Basedow Street, Torrens, where a bus was turned through 180 degrees and carried across the roadway.

Details of the total damage caused to Commonwealth property in the Woden Valley by the flood of January 26 and subsequent storms and floods were:

Yarralumla and Long Gully Creek main drains \$51,500; cut-off drains, head walls, inlet pits etc

\$8,500; roads and road shoulders \$13,000; bridges underpasses and road culverts \$5,000; concrete footpaths \$6,000; clearing of roads \$25,000; Torrens Primary School repairs to floor and floor tiles \$5,000; Farrer Primary School footpaths \$500; Woden Valley Tennis Club repairs to courts \$4,000; unforeseen \$1,500; total \$120,000.

The cost of making good extensive damage in areas maintained by the Parks and Gardens Branch of the Department of the Interior was estimated at \$20,000.

The report said complete details of damage to private property were not available.

The amount reached with the assistance of insurance underwriters was thought to be of the order of \$100,000.

Police patrols directed to the area were unable to travel faster than 35 miles an hour because of extremely poor visibility but within five minutes of the first report of flooding the first road closure was effected and within 15 minutes police were engaged in rescue operations.

The report said warnings

The report said warnings had been given throughout the emergency on commercial radio and television but ABC radio and television stations in Canberra were not manned after 8.15pm in a way which permitted warnings to be given at short notice.

Procedures had since been established to enable warnings for Canberra listeners and viewers to be issued from the Sydney studios where programs originated after that time.

Never, in the period since people had moved into the Woden Valley suburbs in 1964, had there been a flood anything like the one on January 26.

Apart from January 25, the police had been involved with the intersection under flood on one other occasion, on May 10, 1968, when 2ft of water across the road was reported. A member of the force had found the greatest depth was 1ft and there was little current.

"As far as can be ascertained, neither on January 25 nor on any previous occasion was the intersection rendered impassable to traffic by flood", the report said.

"In the circumstances of the time available, the nature of the storm in the Woden Valley and the actual location of the Melrose Drive-Yamba Drive-Yarra Glen intersection and other scenes of extreme danger to life it does not appear that any normal alerting arrangement or police or other emergency service procedures would have been able to prevent the loss of life that occurred".

The report said that the storm was exceptional and extreme, nevertheless it was conceivable that a storm with the same characteristics

could occur again somewhere in Canberra in the future.

Action directed toward preventing a similar disaster in the future or at least reducing the probability of a recurrence might be considered in relation first to flood prevention measures and second in relation to warning systems, emergency procedures and other measures designed to deal with the situation when a flood had arisen.

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