

WODEN FLOOD INQUIRY

500 million gallons

in 48 mins

The volume of rain that had fallen on the Woden Valley in the storm on January 26 had been 500 million gallons, equal to 48 per cent of the storage of the Cotter Dam, and had fallen in 48 minutes, a Department of Works engineer said yesterday.

The storm would have an average return period in excess of 100 years for the Woden Valley, the supervising investigations engineer of the major developments section, of the Department of Works, Mr Bernard Joseph Fitzgerald, told the inquest.

Mr Fitzgerald presented an interim report on the hydrology of the Woden Valley flood.

The report drew the conclusion that compared with subsequent relatively large floods in the Woden Valley on February 5 and 10, 1971, the flood on January 26 had been more hazardous because of the far greater peak flow-rate and because of the rapidity of the rise-rate of the flood, which had caused areas to change from safe to unsafe within a few minutes.

The peak flow along Yarra Glen during the storm had been estimated to have been approximately 1,000 cusecs (cubic feet of water per second).

This flow, together with

the flow in the Yarralumla Creek totalled approximately 7,600 cusecs, Fitzgerald said.

[The maximum capacity of the drain under Yarra Glen-Yamba Drive at Melrose Drive intersection is about 800 cusecs].

"It can be stated

with confidence that the outflow from the Woden Valley reached a peak in the Molonglo River, at the confluence with Yarralumla Creek, of approximately 10,000 cusecs, a cusec being a measurement of flow rate approximately equal to half a million gallons per day", the report says.

"It is apparent that flows of 10,000 cusecs are relatively rare even in catchments many times the size of the Woden Valley, including catchments such as the Cotter catchment which, on the average, receive far more rainfall, as much as 50 per cent more

rainfall than the Canberra urban area".

From data obtained from a meteorological station on Hindmarsh Drive, it could be concluded that subsequent floods had not been comparable to the January 26 storm.

"These later storms and floods, even the largest of them, were not hazardous because of ample warning time by virtue of their relatively slow initial rise-rates, which enabled preventive measures to be

adopted to divert traffic from possible danger areas". Although data on flows in the Woden Valley prior to 1970 was unavailable, it appeared certain that the valley did not have a past history of flows of the magnitude of that on January 26.

Mr Fitzgerald told the coroner that flood waters had stretched for 6000 feet across the Yarra Glen and Yarralumla Creek on January 26.

The velocity of the water would have been more than 22 miles an hour.

Police gave evidence yesterday how they had closed the Yarra Glen to traffic on January 25, the day before the disastrous flood, then on several days since, including Tuesday of this week.

The inquest will continue today.